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# BULLETIN

OF THE

# PAN AMERICAN UNION

## VOL. XXXII

JANUARY–JUNE

1911

JOHN BARRETT : Director General

FRANCISCO J. YÁNES : : Assistant Director

WASHINGTON, D. C., U. S. A. : : : : : : :

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INTERNATIONAL UNION OF AMERICAN REPUBLICS

# BULLETIN

OF THE

# PAN AMERICAN UNION

JANUARY 1911




SEVENTEENTH AND B STREETS NW., WASHINGTON, D.C., U.S.A.
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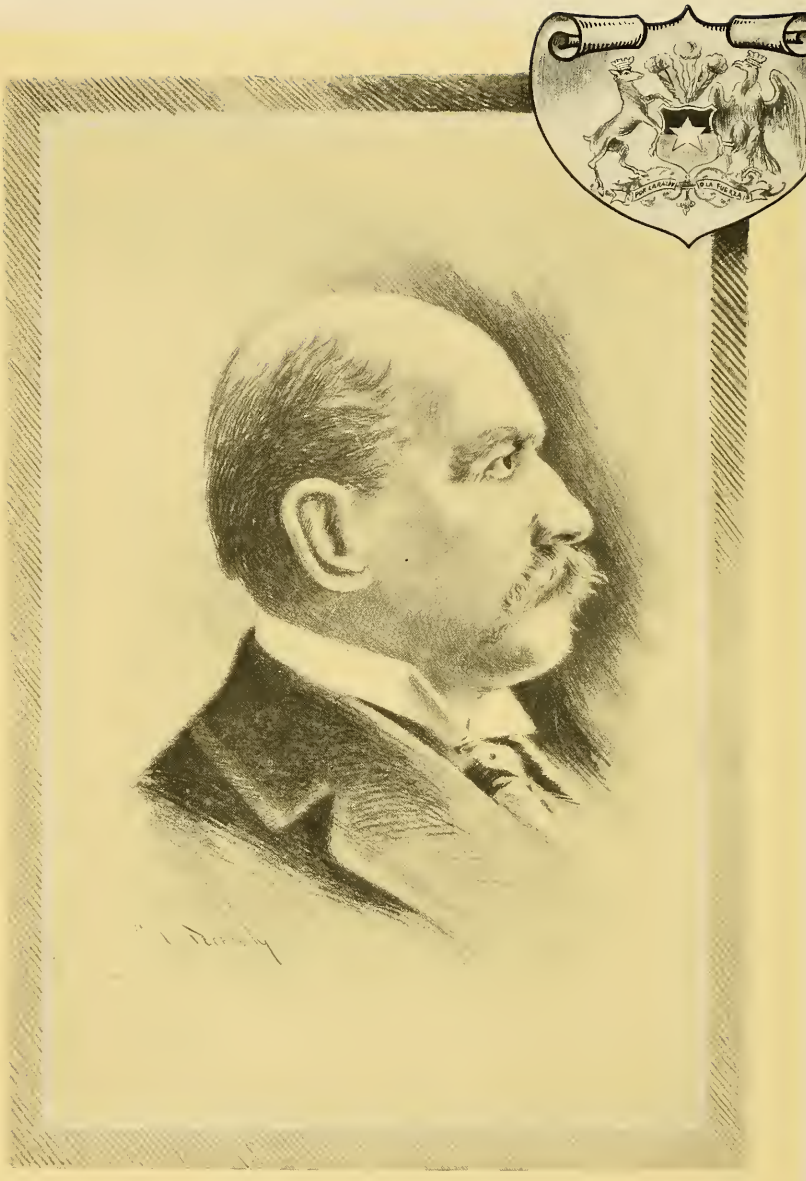
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SEÑOR DOCTOR RAMÓN BARROS LUCO,

Inaugurated President of Chile on December 23, 1910.

BULLETIN
OF THE PAN AMERICAN UNION

VOL. XXXII. JANUARY, 1911. NO. 1

THE annual message of the President of the United States to Congress was one of the most elaborate and carefully prepared official statements which has ever been written by the head of that nation, and it included references to Latin America which showed clearly the importance of the relations of the United States with its sister Republics. In the course of his comments, under the head of Latin America, his reference to the Pan American Union was so direct and specific that it is reproduced below:

The International Bureau of American Republics is doing a broad and useful work for Pan American commerce and comity. Its duties were much enlarged by the International Conference of American States at Buenos Aires and its name was shortened to the more practical and expressive term of "Pan American Union." Located now in its new building, which was specially dedicated April 26 of this year to the development of friendship, trade, and peace among the American nations, it has improved instrumentalities to serve the 21 Republics of this Hemisphere.

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## DR. RAMÓN BARROS LUCO, PRESIDENT OF CHILE.

Dr. RAMÓN BARROS LUCO, inaugurated President of the Republic of Chile on December 23, 1910, had had a long and distinguished public career. Born in Santiago in the year 1835, he received his early education at the "Instituto Nacional," and his legal training at the University of Santiago. Shortly after he entered the political arena, he was elected Deputy for the Department of Casablanca by the Liberal Party. In 1863, upon the creation of the Departments of Copiapó and Caldera, he was elected deputy to represent them. The next year he was appointed Chief Clerk of the Department of Interior. This post he creditably filled for eight years when he was tendered the office of Minister of Finance. He occupied this portfolio throughout the administration of President FREDERICO ERRÁZURIZ. In 1884 he was reappointed to this office by the incoming administration under Señor DOMINGO SANTA MARIA. Five

years later Doctor LUCO was appointed Minister of the Interior, and by virtue of this position became Prime Minister of the Republic. In 1891 he was called upon to head the first cabinet of President JORGE MONTT and later held the premiership for several terms. He has also served as Counselor of State, President of the Senate, President of the National Society of Agriculture, and of the Society for Industrial Promotion, and he has contributed several important judicial works. He also represented his country as Minister Plenipotentiary to France. In recognition of his many years of faithful service in public life he was elected President of the Republic on November 15, 1910.

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### THE COMING PAN AMERICAN COMMERCIAL MEETING.

The Director General is receiving numerous letters from commercia organizations and large exporting and importing firms expressing their interest in the Pan American commercial gathering which will meet under the auspices of the Union early in February. The more information spreads in regard to the proposed programme of this conference the more interest there seems to be aroused. Its unique features of considering import as well as export trade, and, therefore, looking after the interests of Latin-American countries as well as those of the United States, and the complete avoidance of discussion of resolutions, and hence any political questions, make the proposed meeting particularly attractive and capable of doing great good. It will be the first time, moreover, that trained experts in both export and import trade, aside from diplomatic and consular officers, will give practical talks which can not fail to provide just the kind of information that the average exporters and importers need to build up their business with the American Republics. Any commercial organization or representative of exporting or importing concern reading this reference to the commercial conference can ascertain further information by communicating with the Director General.

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### ARTICLES IN THE JANUARY BULLETIN.

The January BULLETIN, the first of the new year, contains a variety of articles pertaining to the American Republics which should satisfy its constituency of subscribers. The different subjects elaborated upon are, "Coconuts in the Americas," "A Traveling Man in Central America: III," "Museums in the Americas," "Ancient Temples and Cities of the New World," "Galapagos Islands," "The National Holidays of Haiti," "School System in Porto Rico," "Prominent in Pan American Affairs," Commercial Notes," etc.




Courtesy of Revista Da Semana. Rio de Janeiro.

PRESIDENT AND VICE PRESIDENT OF BRAZIL AND CABINET.

Dr. Rivadavia Correa, Minister of Justice. Almte. Maroves Leao, Minister of Marine. Dr. Pedro de Tolledo, Minister of Agriculture.

Dr. Hermes da Fonseca, President. Dr. Wenceslau Braz, Vice President. Sr. Dantas Barreto, Minister of War.

Dr. Francisco Salles, Minister of the Treasury. Dr. J. J. Seabra, Minister of Public Works. Sr. Rio Branco, Minister of Exterior.

## DEATH OF SEÑOR CRUZ, THE MINISTER OF CHILE.

The sudden death of Señor Don ANIBAL CRUZ, the Minister of Chile to the United States, on Sunday morning, December 18, was a great shock not only to his intimate friends but to all persons who are interested in the development of closer relations between the Latin-American Republics and the United States. Particularly is he mourned by the Governing Board and the executive staff of the Pan American Union, because he was one of the most active members of the Board, giving his closest attention to the work of the Union and cooperating to make its influence felt for the development of Pan American commerce and comity throughout the entire Western Hemisphere. Mr. CRUZ had a remarkable personality which made him popular not only among his colleagues in the Diplomatic Corps but among Americans in private and public, whether he met them officially, socially, or in the clubs. Through his individual charm, his fluent command of English, and his trait of mingling with the people of the country to which he was accredited he did much to make Chile and all of Latin America well and favorably known in Washington. The Minister's career gave every promise of a brilliant future. He had served his country faithfully for many years, and was highly esteemed as a diplomat and a statesman not only in Chile but in the United States. On Monday, December 19, the day following his death, a special meeting of the Governing Board of the Union was called to draw up appropriate resolutions. All of the Latin-American diplomatic representatives in Washington, and the Secretary of State of the United States were present aside from the director general and assistant director. Secretary KNOX made a notable speech eulogizing Señor CRUZ, and appropriate words were also spoken by the Ambassador of Mexico, Mr. DE LA BARRA; the Minister of Costa Rica, Mr. CALVO; the Minister of Bolivia, Mr. CALDERON, the Minister of Peru, Mr. PARDO; the Minister of Venezuela, Mr. ROJAS; the Minister of Colombia, Mr. BORDA, and the Minister of Ecuador, Mr. ARIZAGA. The following resolution was introduced by Minister CALVO of Costa Rica, and unanimously approved:

The Governing Board of the Pan American Union having heard with profound regret of the death of the distinguished diplomat, His Excellency Señor D. ANIBAL CRUZ, Minister of Chile:

*Resolved:* First. To record in the minutes of this meeting the expression of heartfelt sorrow of each and all of its members upon such lamentable occurrence;

Second. That the expression of these sentiments be transmitted to the Government of Chile, by cablegram, and to Señora DE CRUZ by note;

Third. That the chairman be requested to appoint at the opportune time a committee composed of three members to accompany the venerable remains of Minister CRUZ at the time of their departure to Chile;

Fourth. That a durable wreath with the name of the Governing Board be sent at the time of the funeral.



SEÑOR DON ANÍBAL CRUZ,

The late minister of Chile to the United States.

With military pomp and religious grandeur, the funeral obsequies for Señor ANIBAL CRUZ took place on December 21, at St. Patrick's, where the highest ceremonial rites of the Roman Catholic Church were accorded by the chief dignitaries of that church in America. The services were attended by ambassadors, ministers, and other prominent diplomats from nearly every civilized nation on the globe, by the President of the United States and Mrs. TAFT, members of the Cabinet, members of the United States Supreme Court, and the most distinguished representatives of American legislative, official, and civilian life.



Photograph by Harris-Ewing

TAKING THE CASKET FROM THE LEGATION.

The funeral cortege was escorted with full military honors from the Chilean legation to the church, headed by the Marine Band, and including a battery of the Third Artillery and three troops of the Fifteenth Cavalry. The procession, made up as it was of a brilliance of uniform and court dress, attracted hundreds along its route, who followed it to the doors of the church. As the cortege arrived at the church the military escort stood at attention while the caisson, conveying the metal casket, passed before them, and the Marine Band softly played "Nearer My God

to Thee." The casket was carried into the church by eight noncommissioned officers.

The President and Mrs. TAFT led the procession up the aisle, followed by the honorary pallbearers. Next came the soldiers, bearing the casket, which was covered with an American flag and decorated with a huge Roman wreath and many other floral tributes. The sword and plumed hat of the late Minister lay on top of the casket. As this was borne down the aisle to the slow strains of the funeral march many were visibly affected. The honorary pallbearers were: Secretary KNOX; Ambassador HENGELMÜLLER, of Austria-Hungary; Ambassador J. J.



Photograph by Harris-Ewing.

PLACING THE CASKET ON THE CAISSON ON WHICH IT WAS CONVEYED TO ST. PATRICK'S CHURCH.

JUSSERAND, of France; Ambassador F. L. DE LA BARRA, of Mexico; Minister J. B. CALVO, of Costa Rica; Chief Justice WHITE; JOHN BARRETT, Director General of the Pan American Union; Senator ELIHU ROOT; Senator SHELBY M. CULLOM, Chairman of the Foreign Affairs Committee of the Senate; Representative D. J. FOSTER, Chairman of the Foreign Affairs Committee of the House; THOMAS NELSON PAGE and GIST BLIAR.

The service was opened with a requiem high mass, conducted by Very Rev. BONAVENTURA CERETTI, D. D., as celebrant. After the mass His Eminence Cardinal GIBBONS advanced to the sanctuary and pronounced the ablution. At the foot of the aisle stood the Rev. Dr. NICHOLAS JASELLI, subdeacon, with the crucifix, and near him the acolytes. Near the cardinal stood Monseignior FALCONIO, the apostolic delegate.

With a few words, the Rev. Dr. WILLIAM T. RUSSELL then paid a glowing tribute to the life and character of Minister CRUZ, saying in part:

"Chile has indeed lost a faithful son. One who was unswerving in his patriotism. He has served his country well, and his loss is felt almost as greatly here as in his own country."



Photograph by Harris-Ewing

Señor Alberto Yoacham, Chargé d'Affaires of Chile, the pallbearer representing the Chilean Government, Señor Alejandro Herquinigo, Second Secretary of the Legation, at his right, and Capt. Arturo Cuevas, Naval Attaché of the Legation, at his left. In the background, from left to right, are Senator Root, the Chief Justice of the Supreme Court of the United States, the French Ambassador, and the Secretary of State of the United States, who, with others, acted as honorary pallbearers.

At the conclusion of the services the casket was returned to the caisson and taken to Oak Hill Cemetery, where it was placed in a vault. Many of the Representatives, Senators, Diplomats, and Cabinet members accompanied the cortege to the cemetery.

Arrangements are being made to convey the body of the Minister to Chile on a battle ship of the United States.

## REPRESENTATIVE MEN IN THE PAN AMERICAN SOCIETY.

The movement for the organization of the Pan American Society of the United States is proceeding successfully. Those who are in charge of the preliminary steps are, however, going slowly and carefully in order to make sure of a worthy and representative membership. The number of prominent men who have already signified their pleasure at joining is most gratifying, and there would appear to be no doubt but that this society will be a powerful influence for the development of friendship and better acquaintance between leading Latin Americans and corresponding men in the United States. A Mexican Society has already been formed in New York City, with Hon. JAMES W. GERARD, of the New York Supreme Court, and HAMILTON HOLT, editor of the "Independent," in charge of the work of preliminary organization. And now word comes to the effect that the directors of The Peace Society of the City of New York have formed a board of hospitality, the object of which is to entertain, in fitting ways, distinguished foreigners visiting New York. WILLIAM H. SHORT, the executive secretary of this society is in charge of the correspondence relating to this board of hospitality. For the information of those who may be interested, we give here a list of the names of some of the representative men who have expressed an especial interest in the organization of the Pan American Society of the United States and who will join. An inspection of this list will prove that attention to Pan American affairs is increasing among the kind of men who are accomplishing things in the public, business, and professional affairs of New York City and the country: J. PIERPONT MORGAN, ELIHU ROOT, ANDREW CARNEGIE, HENRY C. FRICK, NICHOLAS MURRAY BUTLER, ELBERT H. GARY, PAUL MORTON, ARCHER M. HUNTINGTON, THEO. P. SHONTS, FRANK A. VANDERLIP, JAMES SPEYER, Gen. STEWART L. WOODFORD, GEORGE WESTINGHOUSE, JOHN WANAMAKER, MELVILLE E. STONE, CHANDLER P. ANDERSON, EDMUND L. BAYLIES, CORNELIUS N. BLISS, EMIL L. BOAS, GEORGE C. BOLDT, CHARLES H. BOYNTON, HERBERT LAWRENCE BRIDGMAN, HENRY CLEWS, LUIS F. COREA, ELIAS A. DE LIMA, JOHN F. DRYDEN, B. N. DUKE, GEORGE L. DUVAL. THOMAS A. EDDY, ALBERTO FALCON, PERCIVAL FARQUHAR, CHARLES R. FLINT, JOHN FOORD, EDWIN GOULD, E. G. GRACE, JOSEPH P. GRACE, Dr. RAMON GUITERAS, JOSEPH W. HARRIMAN, Col. GEORGE HARVEY, WILLIS F. JOHNSON, HARRY PRATT JUDSON, OTTO H. KAHN, THOMAS KEARNY, DARWIN P. KINGSLEY, GEORGE F. KUNZ, FORBES LINDSAY, SILAS MCBEE, CYRUS H. MCCORMICK, SEVERO MALLET-PREVOST, FREDERICK TOWNSEND MARTIN, JOHN G. MILBURN, CHARLES A. MOORE, JOHN BASSETT MOORE, HENRY MORGENTHAU, JOHN R. MOTT, FRANK A. MUNSEY, FRANKLIN MURPHY, LEWIS NIXON, F. S. PEARSON, ROBERT E. PEARY, ROBT. P. PERKINS, HENRY CLAY PIERCE, CORNELIUS A. PUGSLEY, Prof. L. S. ROWE, CHAS. A. SCHIEREN, Jr., JACOB H. SCHIFF, MORTIMER. L. SCHIFF, J. G. SCHMIDLAPP, CHARLES M. SCHWAB, Dr. ALBERT SHAW,

CHAS. H. SHERRILL, WILLIAM H. SHORT, JOHN A. SLEICHER, JAMES RUSSELL SOLEY, FRANCIS LYNDE STETSON, Prof. W. R. SHEPHERD, JAMES A. STILLMAN, JAMES STOKES, OSCAR S. STRAUSS, OSWALD GARRISON VILLARD, ERNEST H. WANDS, GEORGE CABOT WARD, GEORGE P. WILSON.

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### TRANSLATION OF TARIFF LAWS.

In the practical work of the Pan American Union in collecting and distributing useful information about the tariffs of the American Republics, it can be stated that it is now planned to have the tariff law of the Argentine Republic printed and ready for distribution early in January. As the tariff laws of nearly all of the Republics appear originally in the language of the country and not in English, they are of little actual value to the average exporter of the United States until translated, and the great difficulty with most translations in the past is that they were inaccurate or unreliable. It is of course absolutely impossible to make a translation that is free from any ambiguity. This can be appreciated when it is remembered that disputes constantly arise over the meaning in English of the tariff law of the United States. Wherever there is doubt about the exact meaning of the Spanish or Portuguese the wording in the original language will also be printed in order that comparison can be made by any person who might wish to know the actual terms of the law. In going over the tariffs of Latin America which have been published by various agencies, the Pan American Union has found many errors. It is hoped to eliminate these as far as possible. As soon as the Argentine tariff has been prepared those of Mexico, Brazil, and other countries will be taken up as rapidly as possible.

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### THE READERS' GUIDE AND THE MONTHLY BULLETIN.

The Readers' Guide of Periodical Literature, published by the H. W. Wilson Company, Minneapolis, Minnesota, has commenced listing all special articles published in the MONTHLY BULLETIN, including many which appeared in the year 1910. This company brings out both a monthly and an annual index of articles appearing in the principal magazines and reviews, both of which are a great help to the man who wishes to keep in touch with the best things appearing in current publications.

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### A CELEBRATED LECTURER TO VISIT SOUTH AMERICA.

It is with particular satisfaction that the Pan American Union has learned that, in response to its urging and recommendation, BURTON HOLMES, the celebrated traveler and lecturer, has decided to make an extensive tour of South America for the purpose of preparing a series of



SEÑOR DON RÓMULO S. NAÓN,

The newly appointed Minister from the Argentine Republic to the United States. Señor Naón was Minister of Public Instruction and Justice in the Cabinet of former President Alcorta of Argentina, and previous to that he was a Representative of the city of Buenos Aires in the National Congress.

illustrated lectures on that part of the world. For over twenty years Mr. HOLMES has been engaged in this work of educating the American people about other countries. He has a remarkable faculty for picking out the salient facts concerning each land and its people and also of taking wonderful photographs which confirm and embellish the story he is telling. He has been engaged so long in his field of effort that he is now well known all over the United States and his lectures are attended by the best class of people in each city where he appears. Recently it was the privilege of the Director General to entertain him at luncheon in the new building of the Pan American Union and invite to meet him the diplomatic representatives of the countries which he will visit. They all evinced much interest in his proposed journey and expressed the belief that his lectures would be a valuable influence in making the South American countries better known throughout the United States. It is probable that Mr. HOLMES will leave for South America in February and be absent nearly seven months.

---

### ILLUSTRATED LECTURES ON LATIN AMERICA.

In response to the constant demand that is made upon the Pan American Union for assistance in presenting Latin America to the world in an interesting manner, a series of four lectures on Latin America, illustrated with colored slides, has been carefully prepared, and these will be loaned to various educational institutions upon their application. Whether this method of diffusing knowledge can be maintained will depend largely on the persons to whom the lectures and slides are loaned taking good care of them and returning them promptly to this office so that they can be sent to other places. Instructive and interesting data about all the American Republics has been put into lecture form by one of the staff of the Pan American Union who has visited all parts of the American Republics and who has had considerable experience in lecturing. The photographs are selected from the latest ones which have come to the Union from the various countries and which have been collected by its representatives.

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### THE UNITED STATES MINISTER TO VENEZUELA.

JOHN WORK GARRETT, the newly appointed Minister to Venezuela, was born in Baltimore, Md., May 19, 1872, and graduated from Princeton University in 1895. In 1901 he was appointed Secretary of the Legation at The Hague, and acted as secretary to the American-Russian Sealing Arbitration and to the Arbitral Tribunal in the Venezuelan Preferential-Treatment Case. He was then appointed Secretary to the Legation at the Netherlands and Luxemburg, in 1903, and while at this post served

as chargé d'affaires at various times. Mr. GARRETT represented the United States as a delegate to the Hospital-Ship Conference, at The Hague, in 1904, and signed the Hospital-Ship Convention. The following year he was appointed second secretary of the embassy at Berlin, and here, too, frequently acted as chargé d'affaires. In 1908 he was promoted to the position of Secretary of the Embassy at Rome. This position he held up to the time of his appointment as Minister to Venezuela.

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### HAMBURG-AMERICAN EXCURSION TO SOUTH AMERICA.

The Hamburg-American Line is to be congratulated on sending the *Bluecher* of its line for another extended cruise to South America. The one undertaken last year attracted a great deal of attention and was sufficiently successful to encourage the company to repeat it this year. All those who made the first trip came back with such interesting reports of what they had seen that there should be no question as to the enjoyment and practical value of the journey. The excursion this year should be much more agreeable and successful even than that of last year, because the managers have gained an experience which will be most useful in conducting this trip. The way the travelers of last winter were received everywhere gives assurance of the hearty welcome to those who go this season. There is no surer way of bringing about permanent good relations between North and South America than the exchange of travel. Almost every North American who goes to South America returns with a degree of respect for that part of the world of which he had never dreamed before, while the average Latin American who comes to the United States generally returns with a kinder feeling toward his northern neighbor than he entertained previously.

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### ADDRESSES BY MEMBERS OF THE GOVERNING BOARD.

Several members of the Governing Board of the Pan American Union have recently delivered important addresses. In the latter part of November the Minister of Bolivia, Señor Don IGNACIO CALDERON, spoke before the Trans-Mississippi Congress at San Antonio, Texas, discussing the effect which the opening of the Panama Canal will have upon the development of trade between the United States and the west coast of South America, and especially with his country, Bolivia. At the meeting of the Red Cross Society which was held in Washington on Tuesday, December 6, the Minister of Costa Rica, Señor Don JOAQUIN BERNARDO CALVO, talked interestingly about the Cartago earthquake. At the National Waterways Congress in Washington on Tuesday, December 6, the Ambassador of Mexico, Señor Don FRANCISCO LEÓN DE LA BARRA, described graphically what Mexico has done in the improvement of its rivers and harbors.



HON. JOHN W. GARRETT

United States Minister to Venezuela.

The facts which he presented surprised the majority of the delegates present and showed plainly the remarkable progress which that country is making along that line. On December 14, at the Sixth Annual Convention of the American Civic Association, held in Washington, the Minister of Cuba, Señor Don FRANCISCO GARRERA JUSTIZ, delivered a most instructive talk on Cuban Municipalities and Their Civic Progress. Extracts from these addresses appear elsewhere in this issue of the BULLETIN.

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## THE INTERNATIONAL SCHOOL OF AMERICAN ARCHÆOLOGY.

Dr. FRANZ BOAS, of the Department of Anthropology of Columbia University, New York City, is to be commended in his efforts to make a success of the International School of American Archæology and Ethnology which has been established in the City of Mexico by cooperation of the Government of Mexico, Prussia, and three American universities. Doctor BOAS informs the Pan American Union that the Government of France has also sent a delegate and that the formal adhesion of that Government is expected at an early date. The Austrian delegate at the International Congress of Americanists has also expressed the desire of the Government of Austria to cooperate. In urging the practical cooperation of the United States in this international undertaking, Doctor BOAS suggests that the United States Government should obligate itself to send approximately every seventh year an expert to be director of the school. He points out that the United States has among its officers in the Smithsonian Institution a number of men whose services in this international school would be highly desirable. Furthermore, the regulations provide for an annual contribution of $500, either for the appointment of a Fellow by the Government of the United States or for supplying funds for researches in case an appointment of a Fellow should not be made. To carry out these obligations an annual appropriation of $1,000 by the United States would be sufficient. This, in a period of six years, would accumulate enough money to pay for the salary of the Government officer who might be detailed to serve as the director of the school. The Government of Mexico has shown so much interest in this International School of American Archæology and Ethnology that its friends in the United States all hope that the Government at Washington may find it possible to make the desired appropriation.

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## AN ARGENTINE NEWSPAPER REPRESENTATIVE.

It is with pleasure that the Pan American Union has received a letter from Mr. J. P. SANTAMARINA, who informs us that he has come to the United States as the representative of "La Razón," of Buenos Aires, the capital of the Argentine Republic. He intends to do all in his power

to develop trade between the United States and Argentina and to disseminate information in the United States about his country. He will deliver lectures, maintain a bureau of information, and in other ways do what he can to make his country better known in the United States and the United States better known in Argentina. He has established offices at 8 West One hundred and first street, New York City, and invites correspondence from all those who may wish to communicate with him.

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### A NOTABLE BOOK BY DR. F. CARRERA Y JUSTIZ.

The Director General is in receipt of the two volumes of a most interesting work entitled "Introducción á la Historia de las Instituciones Locales de Cuba," which has been written by a member of the Governing Board of the Pan American Union, the Minister of Cuba, Dr. F. CARRERA Y JUSTIZ. A reading of this work shows the high scholarship and the capacity for research of Doctor CARRERA Y JUSTIZ. The original is in Spanish, but it is hoped that it may yet be translated into English, so that it may find a wide field of readers in the United States and England. The Director General is grateful to the author for the receipt of an autographed copy of this notable book.

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### GOVERNMENT OWNERSHIP OF EMBASSIES.

The American Embassy Association, with headquarters at 505 Fifth avenue, New York City, is continuing its efforts to develop sentiment throughout the United States in favor of ownership by the United States of its embassies and legations in foreign countries. One of the particular fields for its efforts is Latin America, and steps should be taken at once for the United States to purchase its own embassies in Mexico and Rio de Janeiro and its legations in Buenos Aires, Santiago, Lima, and Havana. E. CLARENCE JONES is President and FRANK D. PAVEY, Secretary and Treasurer, while the executive committee includes: FREDERICK TOWNSEND MARTIN, CHARLES M. SCHWAB, ALBERT SHAW, WILLIAM R. WILCOX, and other representative men.

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### GEOGRAPHICAL DICTIONARY OF CHILE.

The Director General is pleased to receive from Mr. GEORGE ASTA-BURUAGA a copy of "Diccionario Geográfico de la República de Chile." A glance through this book shows that it must be of great practical value for reference and study by those who wish to familiarize themselves with places and geographic conditions of the great Republic of Chile.

# COCONUTS IN THE AMERICAS[a]

IT has been commonly remarked that the uses of the coconut palm (Cocos Nucifera) are as numerous as the days of the year. Found nearly everywhere within the Tropics, almost the sole dependence for food of the palmivorous inhabitants of many countries, this king of low tropical countries furnishes man with food, drink, medicines, domestic utensils, materials for boat and house building, oil for cooking, lighting, and lubricating, and innumerable other purposes, and is of all the Palmaceae the one that yields the greatest variety of products. TENNANT has truly said that of the coconut palm a ship can be built and laden, too.

DE CANDOLLE, in "Origin of Cultivated Plants," does not consider the coconut palm a native of the Western Hemisphere, but places its original habitat in the Eastern Archipelago, somewhere in the neighborhood of Sumatra and Java, and surmises that nuts floated thence both east and west; eastward to the islands of the Pacific and the coast of Central America, and westward to Ceylon and the east coast of Africa. He places its introduction into Brazil, Venezuela, and the West Indies by missionaries about three centuries ago. DE MARTIUS says that the Portuguese introduced it on the coast of Guiana about the same time. The navigators DAMPIER and VANCOUVER found it at the beginning of the seventeenth century in groves on the islands of Panama Bay, as well as on Cocos Island, 300 miles off the Pacific coast of Costa Rica. At that time these islands were uninhabited. Later the coconut palm is reported on the west coast from Mexico to Ecuador, and SEEMAN reported having seen the palm both wild and cultivated on the Isthmus of Panama. In 1526 OVIEDO wrote that the coconut palm was abundant on the Pacific coast in the province of the *Cacique* Chiman, now Darien, Panama.

Argument in favor of an American origin, as stated by DE CANDOLLE, is as follows: The trade winds of the Pacific, to the south and yet more to the north of the Equator, drive floating bodies from America to Asia, a direction contrary to that of the general currents. It is known, moreover, from the unexpected arrival of bottles containing papers on different coasts, that chance has much to do with these transports.

[a] By Charles Melville Brown.



Courtesy of the United States National Museum.

COCONUT PALMS AT SALAMA, GUATEMALA, AT AN ALTITUDE OF 900 METERS.

Mr. O. F. Cook, of the United States Department of Agriculture, in a recent contribution to the Smithsonian Institution on the "History of the Coconut Palm in America," maintains that the arguments of De Candolle on the Old World origin of this palm, which are presented by Mr. Brown in this article, are no longer defended on scientific grounds.

His arguments contrary to an American origin of the coconut palm and in favor of an Asiatic are as follows:

First. A current between the third and fifth parallel, north latitude, flows from the islands of the Indian Archipelago to the Gulf of Panama. To the north and south of this are currents which take the opposite direction, but they originate in regions too cold for the coconut, and do not touch Central America, where it is supposed to have been long indigenous.

Second. The inhabitants of Asiatic islands were far bolder navigators than the American Indians. It is very possible that canoes from the Asiatic islands, containing provisions of coconuts, were carried by storms or false maneuvers to the islands of the west coast of America; the contrary is highly improbable.

Third. The area for three centuries has been much vaster in Asia than in America, and the difference was yet more considerable before that epoch, for it is known that the coconut has not long existed in the east of tropical America.

Fourth. The inhabitants of the islands of Asia possess an immense number of varieties of the palm, which indicates a very ancient cultivation. BLUME enumerates 18 varieties in Java and adjacent islands, and 39 in the Philippines. Nothing of a similar nature has been observed in the Americas.

Fifth. The uses of the coconut are more varied and more habitual in Asia.

Sixth. It is not probable that the ancient Mexicans and inhabitants of Central America would have neglected to spread the coconut in several directions had it existed among them from a very remote epoch. The little breadth of the Isthmus of Panama would have facilitated its transportation from one coast to the other and the species would soon have been established in the West Indies, as it has since become naturalized there since the discovery of America.

Seventh. If the coconut in America dated from a geological epoch anterior to the Pliocene or even Eocene deposits in Europe, it would probably have been found on both coasts and the eastern and western islands of tropical America equally.

Eighth. No ancient data of the existence of the coconut in America have been found, but its presence in Asia three to four thousand years ago is proven by several Sanskrit names.

From these facts the most ancient habitation in Asia would be in the archipelago and in America in the islands west of Panama. Its introduction into Ceylon, India, and China, DE CANDOLLE states, does not date further back than three thousand years, but the transport by sea to the coasts of America and Africa took place perhaps in a more remote epoch, although posterior to those epochs when the



GATHERING COCONUTS.

geographical and physical conditions were different from those of our day.

In early botanical works coconuts are mentioned, being derived from an East Indian word, *coc* or *cocuc*, used to indicate the fruit of the Cocos Nucifera, or coconut of a fancied resemblance of the three



Courtesy of "The Garden Magazine."

THE BLOSSOMS OF THE COCO PALM, WHICH SOMETIMES YIELDS A NUT FOR EVERY DAY IN THE YEAR.

circular depressions to the face of a monkey, whose conversational powers are limited to uttering a sound like "coco."

At the present day, on the islands of the Bay of Panama, such as Coiba, Coibita, Jicaron, Montuosa, Ladrones, and along the southwestern coast of Chiriqui in Panama, and Punta Burica and Golfo Dulce in Costa Rica, are found dense groves of wild coconut palms,

the fallen nuts piled up around their base, in many instances to a depth of 2 and 3 feet, washed back and forth by the swirl of the great tides of these coasts until hurled against some jagged rock the protecting husk is torn away and the tender kernel becomes the prey of the myriads of soldier crabs patrolling these great sandy stretches at low tide. Others are carried by swift currents to near-by coasts, where, thrown high on the beach at flood tide, they may germinate and take root; others come as floating manna to becalmed pearl-fishing crews, supplying at once food and drink to the divers whom the tides carry far from their base of supplies—an analogy to the aphorism of the ill-wind.



Courtesy of "The Garden Magazine."

HOW THE COCONUT SPROUTS THROUGH ITS THICK OUTER HUSK.

In five years this will bear fruit.

Accepting De Candolle's theory as correct, this same process of distribution from the low-lying coasts of the eastern archipelago to these islands of the Bay of Panama, mentioned by Dampier and Vancouver in their explorings, might have been seen taking place a thousand years before the Christian era, or by Columbus's successors in the Dukedom of Veraguas, off which coast they lie; thence carried by human agency to farther shores, north into Central America and Mexico, south into what is now Colombia and Ecuador, and across the Isthmus of Panama to the Mosquito Coast, Venezuela, and the West Indies, there to meet with those brought over from Africa by either ocean currents or early explorers.

In the Americas to-day the coconut is an important product of Mexico, Guatemala, Nicaragua, Honduras, San Salvador, Costa Rica, Panama, Colombia, Ecuador as far south as Guayaquil, Venezuela, Guiana, and Brazil; and in the West Indies, Cuba, Santo Domingo, Haiti, Bahamas, Jamaica, and Trinidad. Coconuts are being planted

more extensively every year in southern Florida, and within a few years will doubtless constitute an important product of that State. Pacific America sends coconuts to the San Francisco market from the Hawaiian Islands, while copra, or the dried kernel, and oil expressed therefrom, reach this market from the Orient.

Along the coast of Brazil there are wild coconut groves over 200 miles long, and millions of nuts are shipped annually from this country to the United States and Europe. Mexico reduces much of its product to oil and ships to the United States in this form, although a good trade in raw nuts is maintained. Of those exported from Cuba, Honduras, Nicaragua, Panama, and Jamaica, the greater part is in the raw state. It is from the San Blas Indian coast of Panama in the Caribbean, and from the islands of Bonilla, Bonaco, Truxillo, and Ruatan on the east coast of Honduras that the largest and best quality coconuts come to the New York, New Orleans, and Mobile markets.

Trinidad reduces much of its product to copra, for Europe, and oil, principally for the local consumption of its large East Indian population. Guatemala, San Salvador, and Costa Rica consume locally their product of coconuts, usually for edible purposes or in the form of oil for cooking, lighting, and lubricating.

In 1908 the approximate estimate of area under cultivation in the coconut palm in all parts of the world was as follows:

| | Acres. |
|---|---|
| Mexico, Guatemala, Nicaragua, San Salvador, Honduras, Costa Rica, and Panama | 255,000 |
| Colombia, Ecuador, Venezuela, Guiana, Brazil | 510,000 |
| Cuba, Santo Domingo, Haiti, Jamaica, Trinidad, and other West Indies | 115,000 |
| Ceylon | 755,000 |
| British India and dependencies | 420,000 |
| Eastern Archipelago, Philippines, New Guinea, and Straits Settlements | 355,000 |
| Java and Sumatra | 250,000 |
| Mauritius, Madagascar, Zanzibar, Seychelles, Reunion, and African coast | 115,000 |
| Pacific islands, including New Caledonia, Fiji, Hawaii, etc | 265,000 |
| Siam and Cochin China | 100,000 |
| Total | 3,140,000 |

On this vast area there are probably 220,000,000 palms bearing fully 7,000,000,000 nuts annually, the majority of which are consumed for food purposes where produced. While kerosene has almost entirely superseded coconut oil for lighting purposes in oriental cities, yet thousands of gallons of it are still used for this purpose, as well as in the hamlets of Central and part of South America.

Ceylon exports coconut products to the Americas, principally desiccated meat, oil, coco fiber, and yarn.

The annual export trade of Central and South America in all products of the coconut palm is valued at $1,950,000; that of the West

Indies at $1,100,000. In Jamaica it is estimated there are 15,000 acres under cultivation in coconuts, with an annual export of 12,000,000 raw nuts. In Trinidad there are 5,000 acres under cultivation, with an annual export of 9,000,000 nuts. From the San Blas coast of Panama alone 6,000,000 nuts are shipped annually to the United States. These last nuts average from $33 to $45 per thousand on the New York market and are considered to be of the finest quality in the world.



Courtesy of "The Garden Magazine."

COCONUTS IN ONE OF THE EARLIER STAGES OF GROWTH.

Later they bend the stalk with their weight.

A description of the tree itself, the uses to which its products are put, its cultivation, and prospects for future development may prove of interest.

The coconut palm flourishes near the equator and as far north as 80°, especially along low coasts, although many are found in India at an elevation of 3,000 feet, and cases are known where the palm does well at an elevation of 4,500 feet above the sea.

The trunk is cylindrical, sometimes as much as 2 feet in diameter at the base, and rises to a height of from 60 to 100 feet. From the bottom upward on the outside are alternate rings which mark the place where the old leaves were attached. The approximate age of a palm may be ascertained by counting the number of rings found



Courtesy of the Philadelphia Commercial Museum.

CROSS SECTION OF COCONUT IN SHELL AND HUSK.

on the outside of the trunk, counting 12 to the year, for a healthy palm will put forth a new leaf each month, unless hindered by some outside influence, such, for instance, as too much shade or by coming into contact with other trees.

The slender trunk is surmounted by a crown of from 16 to 22 gracefully curved pinnate or feathery leaves, each 18 to 20 feet in



Courtesy of the Philadelphia Commercial Museum.

GATHERING COCONUTS, GUADELOUPE.

length; composed of a strong, tough petiole or footstalk, with numerous long, narrow, sharp-pointed pinnæ or leaflets 1½ to 3 feet in length, arranged along both sides of it, giving the entire leaf the appearance of a gigantic feather. The base of the stalk spreads out so as to clasp the stem, and is surrounded by a kind of fibrous network of a light-brown color, very much resembling burlap. Therein nature provides for the protection of the tender young stem, and in the close fit of the imbricating leaves which inclose it on all sides, and which retain their hold on the trunk until they rot in situ.

The flowers are arranged on branching spadix 5 to 6 feet in length, both male and female flowers being on the same one, which is inclosed in a strong, tough-pointed spathe, which splits open on the under side, displaying the delicate white but inconspicuous flowers. These are succeeded by racemes containing from 15 to 45 nuts, each of which grows to be about a foot long by 6 to 8 inches wide, of a three-sided form, covered by a thick fibrous rind or husk which incloses a single seed, the kernel of which is contained within a hard inner shell.

As a rule a coconut tree throws out a spathe and a leaf every month, each flowering spike yielding from 10 to 25 ripened nuts. The product of a healthy tree properly tended may be from 50 to 120 and even 250 nuts annually, according to age and location, the yield depending greatly, of course, on the suitability of the climate and soil to coconut cultivation. A safe average would be 100 nuts per year for each palm. The East Indian says a palm will produce a nut for every day in the year; but while this might be true in exceptional cases, yet it would not serve as an average.

The best productive years of the coconut palm are from eight to forty years, although it will live and continue to produce for seventy to one hundred years. Along tropical coasts protected from heavy winds, such as parts of the Pacific coast of Central America, more especially in the Bay of Panama and Golfo Dulce, centurion palms over 100 feet in height may be seen standing out in silhouette against the tropical sky, their spreading fronds high above swishing to and fro in the tropical night, like some monstrous bird descending to earth.

The principal products of the coconut palm are raw nuts, from which the desiccated meat is made; copra, or the dried kernel, from which in turn oil is expressed; *poonac*, or the residue after extracting the oil; and *coir*, or the fiber of the woody husk.

The uses of these products, as well as of every portion of the palm itself, are almost innumerable. TENNANT says a vessel may be built by layers of rafters from the trunk of the coconut palm, both for the ribs and sides of the hull of the vessel. The interstices or seams may be filled by *coir* fiber, then calked and painted. The floor of the deck may be laid with rafters and these also calked and painted. The mast may be made of the well-seasoned trunk of the coconut



Courtesy of the Philadelphia Commercial Museum.

SORTING AND HUSKING COCONUTS ON BEACH, PHILIPPINE ISLANDS.

palm. The rope and hawsers may be made of the fibers; the sails may also be made of the same material. Then the vessel will be from stem to stern made entirely of the coconut tree. It may be laden with the following: Coconut rafters, *coir*, yarn, mats, rugs, brushes, coconuts, *arrack*, copra, oil, and *poonac*. Thus the vessel will be actually built and laden with the coconut tree itself.

Commencing with the root of the palm, some of the uses to which this most useful of trees is put are as follows:

From the roots is extracted a febrifuge; the trunk is used for house building, sailing boats, laths, furniture, firewood, and when divided into two it is used as gutters. The lower part of the stem becomes very hard and takes a beautiful polish. It is known in the market as porcupine wood and is used in the manufacture of fancy articles. A powerful oil is extracted from the bark, which is employed as a linament in cutaneous diseases.

The undeveloped leaves cut out of the heart of the tree are used in the same way as we use cabbage; the brown fibrous network around the base of the leaves is used for sieves and also made up into fishermen's garments. It is also woven into odd-shaped hats and bonnets, and used for cushions, mattresses, and many other purposes. The developed leaves are used for roofing, mats, baskets, torches, fuel brooms, fodder for cattle, and manure. The stem or peticle of the leaf is used for fences, yokes, oars, carrying burdens on the shoulders, fishing rods, and numerous domestic utensils. The leaves are plaited into mats and screens and also made into baskets, and the natives of the Friendly Islands made combs of the midrib. In the Laccadive Islands mats are made of the leaves, of fine quality and much esteemed when exported. These islanders also employ them for the sails of small boats. The Sinhalese split the fronds in halves and plait the leaflets neatly, so as to make excellent baskets; they form the usual covering for their huts, as well as of the bungalows of some Europeans. The dead fronds are sometimes used as torches or for fuel; the midribs, fastened together, are used as brooms on the decks of vessels, as the fibers of the stalks are tough and woody.

From the spathe and flower a liquid substance is obtained resembling watery milk, and which is called "toddy." This is sweet and cooling when fresh, but after exposure to the sun for a short time becomes soured and intoxicating. The spirits obtained from this liquid is known as *arrack*, and in Ceylon forms a source of revenue to the British Government. Medicines and sweetmeats are made from the unformed nut, and the young nut and its milk are used for drinking and dessert, and its green husk is used for preserves.

The ripened nuts are used for eating, for curry, milk, and for cooking. The milk of the ripened nut is boiled and evaporated, thereby obtaining oil, which is used for rheumatism, anointing the



Courtesy of the Philadelphia Commercial Museum.

OPENING COCONUTS, PHILIPPINE ISLANDS.

hair, in the manufacture of soap, candles, for lighting, lubricating, and cooking. The *poonac* or refuse of the grated nut, after expressing the oil, is used for fattening cattle and hogs and as a food for poultry. The shell of the nut is used for drinking cups, basins, lamps, charcoal, tooth powder, lampblack, artificial coffee, spoons, medicine, beads, bottles, and knife handles.

The external husk, after having been soaked in water for a certain period, is beaten out into a fiber called *coir*, of which are made mattresses, cushions, ropes, cables, cordage, yarn, canvas, brooms, plasterers' brushes, bags, fishing nets, oakum, floor mats, and fuel.

A much prized dish of tropical Americans is made of the *esponja*, or sponge of the coconut. This is the germinated embryo within the inner shell, which is eaten raw or made up into a salad. The milk of the unripened nut is deliciously refreshing, and in it the tropical traveler is assured of a fresh, cooling, uncontaminated drink. Millions of nuts are consumed in this manner.

A case is reported in 1883 from the south Pacific of a shipwrecked crew on an island there, living for a month on nothing but coconuts, and occasionally fish, and flourishing and gaining weight.

In Germany a very satisfactory butter is made from coconut oil. It contains butyric and decyclic acids, which gives it a pleasant aroma and savor, making it taste something like a hazelnut. It will keep for 15 to 20 days before showing any acid reaction, is a better substitute than oleomargarine, and can be produced more cheaply.

So highly valued is the coconut in the Orient that TENNANT mentions a claim in court in Ceylon for the two thousand five hundred and twentieth part of 10 coconut palms.

Throughout the Americas are to be found thousands of acres of virgin coconut lands, especially along the coast of the Caribbean and the west coast of Central America, from Mexico through the Isthmus of Panama into Colombia. Coconut planting is being encouraged by the various Governments, as a result of which extensive areas are being put under cultivation in this palm. Therefore a short description of the best classes of soil suited to its cultivation, as well as of methods of cultivation, its enemies and methods of combating them, will be given.

First of all the coconut palm is a halophyte, growing best in salt marshes, along the seacoast, or partly in salt water. It thrives best in low, sandy soils, within the influence of the sea breeze, and rarely ever attains the same perfection when grown inland, nor does it produce as early nor as heavily inland as along the seaboard.

A well-watered tree, in good sandy loam, begins to yield at 5 years of age, and in poor soil when it is 8 to 10 years old. Trees growing in mangrove soils, on the side of creeks, and more or less saturated with salt, have saline sap and their nuts have brackish



Courtesy of the Philadelphia Commercial Museum.

SUN-DRYING COCONUTS ON TRAYS, PHILIPPINE ISLANDS.

milk. Such trees do not suffer from the attack of the rhinoceros beetle, which at times cause great damage in plantations located at any considerable distance from the coast, and bear much sooner and more prolifically than the latter. Stony ground, or that overlying a rocky foundation, is not at all suitable for coconut cultivation, and should be avoided in the selection of a site for this purpose.

The best soils for coconuts are those mixed with sand, either dark loam or river wash; sandy soil mixed with clay, ferruginous earth, or black mold; light clayey soil where there exists an understratum of sand; a mixture of sand and clay that does not pack, even though it be mixed with gravel and pebbles; the seashore, banks of backwaters or of tidal rivers; alluvium of rivers and backwaters at an elevation of no less than 4 feet above high water; marshy lands in brackish waters, but not where salt is formed in crystals by evaporation; all level stretches of sandy soil exposed to the sea breeze where the land is naturally rich, such, for instance, as low valleys near the sea. The prime requisite is a thoroughly permeable soil, from which the palm can obtain a copious supply of water, and it is doubtless due to this reason that the rich, permeable, well-drained alluvial soils mixed with decomposing marine algæ, which generally border on the seashore, are held to be the best suitable for successful coconut cultivation. It flourishes beautifully on the Pacific atolls at an elevation of 2 to 3 meters above sea level, where the soil is formed by débris of coral mixture and the remains of sea creatures. The palm thrives in sunshine and plenty of water, and for this reason does best on cleared land where its leaves do not come in contact with other vegetation.

A well-distributed rainfall of 60 to 100 inches per year is required, although it will thrive on deep soil with an annual rainfall of but 50 inches where the roots can easily spread out in search of water. Too much rainfall for the coconut seems impossible; the best nuts that come to the New York market are from the San Blas Indian coast of Panama near Porto Bello, where in 1909 the rainfall for the calendar year was 237.28 inches. The land must be well drained, however, otherwise it will sour.

The first steps necessary in the starting of a coconut plantation, after having selected suitable land, is the selection of proper seed nuts from which the young palms are to be grown. Those from middle-aged heavy-producing palms are the best. Small shriveled nuts or those from very old trees are likely to produce slow-growing palms that would not come into bearing until the eighth year or later, and should be rejected. The nuts should be thoroughly ripened and have fallen from the trees, instead of being knocked down.

The usual practice in the Americas is to place the nuts in seed beds near the ocean, packed one against the other and filled in

between with soil to about half the depth of the husk. Nuts that do not sprout within five months from the time of placing in seed bed should be rejected, as, if they do live, the palm will probably lag throughout its life. The nuts are placed slightly on the side in the seed bed.

Clearing and transplanting takes place after the young palms attain a six months' growth, although some planters prefer to transplant them from the first seed bed to a second, setting them out in the latter at a distance of 3 feet apart, and leaving them in the second bed for 12 to 18 months longer.

Whichever method is pursued, the palms are ultimately set out at a distance of from 18 to 30 feet apart, according to the nature of the soil and the country. If they are to be exposed to heavy winds they must be lined so as to offer all possible resistance in the direction from which the heaviest winds usually come, and this has much to do with the manner of planting. At 20 feet apart triangularly 125 palms to the acre may be planted; at 25 feet apart triangularly 82 to the acre. The land is usually cleared during the dry season, transplanting being done at the beginning of the wet season. This method assures favorable conditions under which the young palms begin their new growth.

The length of time that elapses thereafter until the palm comes into bearing depends principally on two things: First, the attention given the palm; and second, the soil. If underbrush is allowed to crowd up between the young palms and overtop them, even on the most fertile soil, the trees may not come into bearing until the seventh to eighth year. If the ground around the young tree for a distance of 6 to 8 feet in each direction is kept clear and the soil is at all suitable for coconut cultivation, a few nuts may be expected between the fifth and sixth years after planting. Thereafter the production per palm will increase until the tenth to twelfth year to from 50 to 250 nuts annually. The East Indian claims that a well-cultivated coconut palm will produce a nut for each day in the year. One hundred to 150 nuts annually is considered a good yield.

All diseased, dead, or fallen leaves should be collected and burned regularly, as the larvæ of insects injurious to the coconut palm find food in the decaying fiber. Dead or dying trees that can not be saved should be cut down and burned immediately.

In Ceylon and India fertilizing in coconut cultivation is carried on, common manure being used. The refuse of the meat after expressing the oil is also an excellent fertilizer, and is used to some extent.

Planters differ as to the value of fertilizing. Two theories are advanced: The elemental constituents of coconut oil are carbon, hydrogen, and oxygen; vegetable physiologists hold that growing




Courtesy of the Philadelphia Commercial Museum.

RAFT OF COCONUTS, MANILA PHILIPPINE ISLANDS.

plants decompose water and air to obtain their supply of those elements. As the supply, therefore, is inexhaustible, removal of coconut oil in any quantity does not tend to impoverish the soil. Hence, the addition of fertilizing elements would tend to raise the production above normal. The second theory in the production of nuts the trees draw from the soil nitrates, phosphates, and alkalies; therefore, outside introduction of these elements should be made by replacing the fertility removed. Extensive experiments have proven the value of fertilizing in securing increased production in coconuts, although it is not practiced to any extent in the Americas and not at all along the seacoast. However, salt is used to a great extent where the palm grows at some distance from the sea.



YOUNG COCONUT PALMS BROUGHT TO THE COLON MARKET FOR SALE.

The Central American native also has a custom which is followed on small plantations. When the palm throws out its first spadix of flowers a dried corn husk filled with coarse salt is placed upright between the inner side of the spathe and the trunk of the tree. During heavy rains the concave surface of the petioles of the leaves bring down little rivulets of water to the crown of the palm. A certain amount of salt is thereby dissolved at each heavy rain, and carried into the crevasses or folds of the cabbage. This is found to be an excellent preventive to the bacterial bud rot that has done much damage in Cuba and Jamaica in late years.

Recently while on an inspection tour through a large coconut plantation in Panama, the writer noticed a partly fallen leaf on a five-year old palm growing immediately along the seacoast. The palm being low, the outer end of the leaf had hit the ground before the base had entirely separated from the trunk, leaving the leaf

resting against the trunk at an angle of about 45°, but partly separated from it. On pulling the dried leaf down a nest of blackheaded caterpillars was found between the base of the petiole and the trunk of the palm, containing 28 dead caterpillars. Each one was covered with minute salt crystals, carried down by the rains from the salt placed at the spadix above, as already described.

Three distinct diseases of the coconut palm are known in the West Indies and Central America, two of which are apparently due to the attack of fungi, the third being of bacterial origin. One fungus attacks the roots and also appears in the petioles, and is known as the *root disease*. This is often due to improper drainage and soured land due to lack of sunshine. The other fungus attacks the leaves, being known as the *leaf disease*, and is also traced to the same cause.

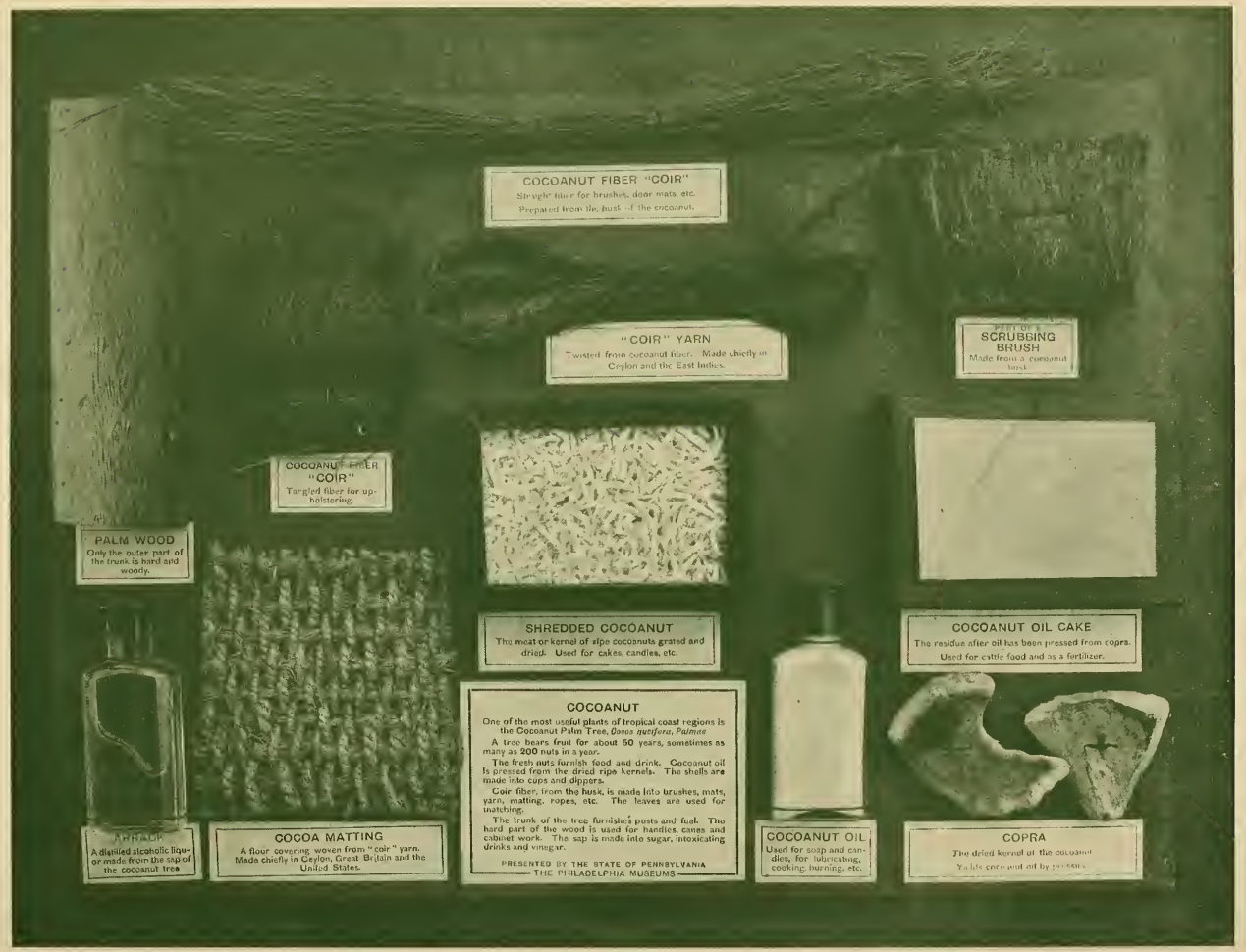


DRINKING THE MILK.

Congressman Edwin Denby, of Michigan, and party of United States Army officers at Old Panama indulging in a cooling drink of the milk from the green coconut.

Experiments within the last few years have shown the most effectual remedy is to spray the affected portion with a strong fungicide quarterly, Bordeaux mixture being very effective.

The bacteria cause rotting to set in in the terminal bud or cabbage, which is known as *bud rot*. This is usually caused by some insect laying its eggs in a wound in the tender stalks of new undeveloped leaves, which later involves the entire terminal bud in a bacterial rot. This is probably the most serious of diseases of the coconut palm. Dr. Edwin Smith, of the United States Agricultural Department, studied the bud rot in Cuba in 1904, and his exhaustive report on this disease and methods of combating it is issued by the Agricultural Department. Diseased trees in an advanced state should be cut down and the entire crown promptly burned.




VARIOUS PRODUCTS OF THE COCONUT PALM.

This collection is one of a series of trays, showing the uses made of various natural products, distributed by the Philadelphia Commercial Museum to the schools of Pennsylvania.

A coconut plantation, like any other commercial undertaking, needs constant attention, and is generally considered to be a conservative investment yielding handsome profits after it comes into bearing.

Rats attack half-grown nuts, making a hole through the husk and shell to reach the jellylike meat inside. The porcupine attacks the stem of young palms, sometimes eating entirely through it. Wild pigs eat the tips of young leaves within their reach when the palm is young. These nocturnal enemies of the coconut are best combated with a shotgun. Cattle should not be turned into a grove until the trees are high enough to keep the leaves out of their reach. Lightning and hurricanes are enemies of the coconut palm as well as of other trees; however, the latter danger may be almost entirely eliminated if a well-protected site is secured. Danger from insects may be reduced to a minimum by planting directly along the seashore within the influence of the salt spray, and by keeping the plantation cleared. Probably nature never intended the coconut to leave the coast; certainly she gives it better protection there from its enemies, heavier production, sweeter meat and milk, and longer life than inland any considerable distance.

Twenty-eight per cent of all the coconuts raised in the world are grown in the Americas, where, however, they are scattered over a much greater area for each palm than is the case in the Orient, thereby making the work of collecting and shipping more difficult and expensive. Due principally to this fact, the vast stretches of coconut groves of Brazil, Venezuela, Mexico, and the western coast of Central America have never been extensively exploited for coconuts. Increasing demand, higher prices than in former years, and the approaching completion of the Panama Canal, which means new markets brought about by improved transportation facilities, are rapidly bringing these fields within the radius of profitable exploitation, in addition to stimulating the scientific culture of this palm throughout tropical America.

Both coasts of Panama are already profiting by their proximity to the Panama Canal, and new plantations on a much larger scale are already being set out in anticipation of the opening of the canal. Favored by an abundant rainfall, equable climate, sea breezes from both oceans, with an artery of transportation to feed all parts of the world passing directly through it, and with its already established reputation for the quality of its product, Panama presents a fertile field for the development of the coconut industry within the next few years. Its west coast does not suffer from the hurricanes that sweep over the West Indies, its markets are up and down both coasts, and it is favored with abundant water transportation, which is an important factor in coconut cultivation.

# ANCIENT TEMPLES AND CITIES OF THE NEW WORLD[a]

## QUIRIGUA.

RUNNING westward from Puerto Barrios, Guatemala, a little town of palm huts with a few larger frame buildings nestling in the depths of Amatique Bay, which in turn opens into the Bay of Honduras, the Guatemala Railway immediately crosses a range of hills and drops into a broad valley. Thence for some 60 miles the railway runs through the tropically rich and fertile river bottom and, leaving the coastal plain, begins the ascent to the capital, Guatemala City.




Down from the mountains in the interior of Guatemala, fed by numerous rivulets and creeks, the Motagua River flows on its way to the Atlantic. It is the typical tropical river, muddy, broad, sluggish, and subject to sudden floods, and during the heavy rains flooding the entire valley from the little town of Los Amates, 60 miles inland, to the coast. To the north and south the entire valley is protected by two ranges of mountains running roughly east and west, which shelter it from severe winds and afford abundant precipitation. The northern range is sparsely wooded and affords natural pasture with abundant wild cane and is topped by scraggly pine. The southern range is heavily timbered

[a] By Victor M. Cutter.



QUIRIGUA RUINS.

Partial excavation, showing walls of squared stones.



IMMENSE CARVED STONE.

The main figure on this stone, weighing probably over 20 tons, represents a woman elaborately dressed.



TOP AND SIDE VIEW OF STONE.

The top and sides of this stone are covered with glyphs and figures which probably represent several Mayan dates.

with the usual tropical woods and is reported to contain valuable mineral lands and actually has several valuable placer gold mines in process of development. The crest of this range forms the boundary of Guatemala, which is still in dispute with her neighbor, Honduras.

Between these ranges lies the valley, a sheltered tropical paradise, of an average width of perhaps 5 miles, as far inland as Los Amates. This broad valley, with its rich soil, abundant animal life, and timber and palms, with a mean temperature of about 80° F. and an annual rainfall of over 100 inches, has every requisite for the support of a vast population.

It is not surprising then, in spite of its stretch of apparently virgin jungle, in which abound the usual tropical birds and animals, that we find this valley the home of one of the oldest American civilizations. Within the last three years the jungle has commenced to give way to large banana plantations, and as the land is cleared the whole valley, on both banks of the Motagua River for a distance of some 40 miles and comprising an area of some 200 square miles, is dotted with ruins of an ancient race: Graves, monoliths, mounds, and stone heaps testify silently to the life which once filled the valley. Undoubtedly a large portion of the Mayas found a most agreeable home here.

Near the little town of Tenedores, 20 miles from Puerto Barrios, the railway has cut through a circular Indian mound some 15 feet in height and 40 in diameter. Near this mound and in the northern foothills there is a clear spring with stones, apparently used by the Indians, lying in clear view at the bottom. High on the mountain above this spring have been discovered various caves containing rudely-marked stones and crumbling sea shells. On all the hills of the northern range westward for 40 miles are graves with the side walls made of smooth, round stones brought from the creeks and rivers. These hills are dotted also with mounds of various shapes, one of the most common being circular with a hollow or depression in the center. Very little excavation has been carried on, and this little has revealed only a few rubbing stones and other flat stones with circular marks, possibly representing coils of a serpent. The rubbing stones much resemble those still in use by the Central American Indians.

To the south of the river are found mounds of greater height, and in these mounds have been found many small pieces of rude pottery, clay whistles, made in the shape of various animals, and the usual stone utensils of the Indian. Of greater interest are the bits of jade and obsidian occasionally found at the base of or near these mounds.

However, the central point of interest in the whole valley is the ruined city of Quirigua. In the heart of the jungle and in the bottom lands about 1 mile north of the Motagua and 1½ miles east of the little town of Los Amates, lies what was once the capital or main



ONE OF THE STELÆ OUTSIDE THE TEMPLE COURT.

This stela is 10 feet high with figures of women on front and back and glyphs on either side.



A STELA FALLEN OR THROWN DOWN BY SOME EXPLORER.

The glyphs here are placed obliquely instead of squarely as on all the other monuments.



THREE STELÆ IN A ROW.

Great attention is paid in the carving to details of dress and ornament and none at all to the human form.

gathering place for the primitive peoples of the valley, and here were erected the grand plaza and the wonderful monoliths which make Quirigua one of the most noted ruins of America.

Some 2 miles to the westward from the main plaza of Quirigua there is a hill some 40 feet in height with two mounds on top and about 50 feet apart, and midway between is a smooth granite shaft about 2 feet in diameter projecting obliquely from the ground about 7 feet in length and possibly formed an observation point. Some 600 feet north are the foothills of the northern range, and here project from the sides of the slopes huge bowlders and ledges of sandstone identical with the material used in the walls, temples, and monuments of the city of Quirigua. These hills may possibly have furnished the huge blocks which may have been rafted down a little stream near by to be later cut into the various stelae and squared blocks of stone for the various structures.

Until recent years the ruined city has remained buried and unknown in the heart of the forest; but now has been reserved as a park of some 75 acres in extent with all the great trees preserved and only enough clearing done to show the relative positions of the monuments and plazas. The entire park is now surrounded by banana plantations and near by is a branch of the Guatemala Railway. Within this park there lie the wonderful remains of what must have been a fairly well-developed civilization, monuments, stelae, animals carved in stone, terraced walls, temples, and pyramids.

The city is laid out with one grand plaza or court and a smaller court which seems to have been for the temples or main buildings. The remaining groups of mounds or buildings are grouped outside the main court, without significant relative position, so far as is now known. The heavy overflows of the Motagua have made fills above the original level of the plaza varying in depth from 1 to 5 or 6 feet. Slight excavation has revealed some paving and possibly the whole area is paved with squared stone. To the northwest lies a blind ditch or canal, which may possibly have furnished the means of rafting the huge stones to their present site for they were all brought from long distances as the soil for miles around is without a trace of stone. At present this ditch has no connection with the Motagua River.

The main group of buildings seems to have been built in the form of an inclosed court or plaza. The terraced walls which form this court to the east and south average some 30 or 40 feet in height and in the angle where they join rise to 60 feet in height. At this point partial excavation has shown several rooms with walls of squared stones and doorways arched with flat stone. To the west the plaza wall is lower, being about 20 feet in height. To the north



THE TALLEST STELA IN THE RUINS

This monument is 26 feet high.



MONUMENT SHOWING HEADDRESS.

The headdress and also the death's head and crossbones occur in nearly all the figures.



STONE IMAGE OF A TURTLE.

This oval stone weighs approximately 10 tons.

the plaza is open with an immense terraced pyramid in the center of the opening. This pyramid measures some 150 feet square at the base and rises to a height of over 40 feet. All the walls and terraces are overgrown with immense trees and the stones are displaced badly by the roots which have forced them out of place and sent them tumbling down the walls. Near the southern wall and directly facing the pyramid lies an immense round carved stone weighing probably well over 20 tons. The main figure on this stone is that of a woman elaborately dressed. This is claimed by achæologists to constitute one of the most wonderful known monuments of ancient civilizations in existence. The top and sides of this stone are completly covered with glyphs and figures with probably several Mayan dates included. Near the eastern wall is a circular stone with the figure of a man in sitting posture, and surrounded by picture writing as yet undeciphered. Near by lies a stone carved possibly to represent a tiger head. Outside the temple court are two stelae about 10 feet in height with figures of women on front and back with glyphs on either side, these latter being surmounted by ornamental feather or scroll work. Near the latter stones are several stelae which have fallen or been thrown down by some ruthless explorer. One of these has the glyphs placed obliquely instead of squarely as on all the other monuments.

On all the monuments great attention is paid in the carving to details of dress and ornament and none at all to the human form, only the face being carefully portrayed. Proceeding northward in the park we come to a sort of secondary group of stones with a wall to the north of these, some 300 feet long. Along the base of this wall are three stelae in a row. The tallest stela in the ruins is some 26 feet high and the illustrations show the important part played by the headdress and also the death's head and the crossbones, which occur in the headdress of nearly all the figures at Quirigua. In this group are two large oval stones weighing each over 10 tons, one apparently representing a turtle and the other a frog. The largest of the stelae, some 5 feet square and over 20 feet high, leans at a sharp angle and must extend at least 10 feet underground, and would even to-day present a difficult problem in transportation through the soft soil of the river bottom, and leads us to wonder as to the means used to convey the stones from the quarry to their present site.

All the monuments are of sandstone, varying much in quality, but all in a fair state of preservation. All the carving is in low relief and not as ornate as that at Copan in Honduras. Archæologists claim to have discovered on the various stelae glyphs with mayan dates, which show the intervals at which the stones were set up, and most of these dates occuring in the ninth and tenth cycles of mayan chronology.



STONE IMAGE OF A FROG.

This oval stone also weighs approximately 10 tons.



THE LARGEST STELA IN THE RUINS.

This stela is some 5 feet square and over 20 feet high. Leaning at a sharp angle it must extend at least 10 feet under ground.

In addition to the stelae mentioned there are other stones of equal interest and many walls or mounds still covered with mold and silt. Only extensive excavation will show the ruins as a whole, and until this is accomplished we shall not know anything of the lives and history of the ancient race who inhabited Quirigua, in the broad Motagua Valley, and whose records to-day are a sealed book.



# MUSEUMS OF THE AMERICAS: BELEM, PARA, BRAZIL[a]

THE "Museu Goeldi," formerly "Museu Paraense de Historia Natural e Ethnographia," occupies in many respects a particular position among the South American museums. From very modest beginnings, and after a period of stagnation and scientific inaction, it has developed, in the last fifteen years of its existence, into a scientific institution which is now generally recognized as the principal center of scientific inves-



THE "MUSEU GOELDI."

The museum building is constructed after the style of the larger Brazilian country houses.

tigation in the north of Brazil. The chief value of the Museu Goeldi lies in its limited, and, at the same time, very extensive programme conceived by its honorary director, Prof. Dr. EMIL A. GOELDI, who was called in 1894 by the governor, LAURO SODRÉ, to reorganize the "Museu Paraense," founded in 1867 by some intelligent and farseeing Paraenses, under the direction of the well-known Brazilian geographer, DOMINGOS SOARES FERREIRA PENNA. This institution, although initiated with enthusiasm, had

[a] By Dr. Jacques Huber, Director, Museum Goeldi.

been allowed to fall into such a state of neglect that it finally became merely a cabinet of curiosities, without any scientific value. The plan on which the Museu Paraense was reorganized in 1894 regarded it not only as a deposit of ethnographical and natural history specimens, but primarily as a scientific center for investigation of the natural history and ethnology of the Amazon Valley. Limiting its field of action to this natural region, Doctor Goeldi has contributed to it its principal source of strength and interest not only for the public of Para, but for the entire scientific world. At the same time it was intended to establish in the new museum a botanical and zoological garden, so that a visitor to the Para Museum, whether he be merely a tourist or a scientist who intends to explore some part of the Amazon region, may find an opportunity to acquaint himself with the Amazonian flora and fauna, not only through books and dead material, but also by its living species. Of course, it was not possible to develop all these lines of activity to the same degree of perfection within the narrow limits of its available area and financial appropriations, but the basis has been laid for future development. In 1900 the name "Museu Goeldi" was given to the Museu Paraense by the governor, Paes de Carvalho, in honor of its reformer.

Since 1894 the museum has been located on the Avenida da Independencia in a country house, whose flower and fruit garden has been the nucleus of the actual zoological and botanical gardens. Actually the establishment and its annexes extend over nearly 4 hectares, and when it shall occupy the whole block it will cover 5.4 hectares. In the center are situated the museum building, the work shops and the zoological garden; the botanical garden encircles the lot, and the houses of the members of the staff extend along the Travessa de Janeiro.

The museum building, constructed after the style of the larger Brazilian country houses, is not altogether suitably adapted for a museum of natural history, as it is too small, divided into rooms with insufficient light, and permits therefore of only a temporary disposition of the collections. Nevertheless, there are many interesting things to see.

The first room, devoted to Amazonian archæology, contains a collection of pottery of the extinct Indian tribes which inhabited the region along the mouth of the Amazon at the time of the conquest. The museum also possesses in this department unequaled treasures in the form of funeral urns and other potteries from the mounds of the island of Marajo and the northern shore of the Amazon, where two expeditions of the museum have made interesting discoveries.

The ethnological exhibit contains valuable specimens from the Amazonian Indians, principally from those inhabiting the Rio Tocantins-Araguaya (collection Frei Gil Villanova from the Cayapos

and Carajas) and from the inhabitants of the River Uaupes (old collection of the museum and collection of Dr. Th. Koch). To this department belongs the large war canoe of the Carajas Indians, of the River Tocantins, now in the museum's yard. This remarkable canoe is 18 meters long and 1 meter wide and is made of a single stem of the cedro tree (Cedrela sp.).

Without doubt the richest department is that of zoology, which occupies the principal hall of the building and two smaller rooms. Principally in vertebrates, this collection gives a fair idea of the Amazonian fauna. There is, for instance, an almost complete series of the Amazonian monkeys and a very rich collection of Amazonian birds. In the smaller rooms groups of the larger Amazonian mammals attract the attention of the visitor. This collection includes specimens of the tapir (*Tapirus americanus*), black and spotted jaguar (*Felis onca*), capivara (*Hydrochœrus capivara*), anteater (*Myrmecophaga jubata*), the beautiful Amazonian eagle (*Harpyia destructor*), and the largest Amazonian freshwater fish, the "pirarucú" (*Sudis gigas*). In the insect collection the butterflies with their splendid colors, the mimetic Orthoptera, large beetles, are conspicuous; but the most complete collection is that of the Hymenoptera (wasps and bees) and of the nests of infinitely varied forms and shapes.



MONUMENT TO THE FOUNDER.

In the midst of the principal Amazonian palms is a monument erected by Governor Augusto Montenegro to the memory of the founder of the Museu Paraense, D. S. Ferreira Penna.

The botanical department occupies two smaller rooms in which are exhibited an Amazonian and a general herbarium, collections of fruits and seeds, beautiful woods, different kinds of rubber, and various other products of the Amazonian forests. The different rubber plants, whose importance to the wealth of this country is well known, and a number of indigenous medicinal plants are represented in herbarium specimens mounted under glass casings. Several large



AMAZONIAN ARCHÆOLOGY.

The room devoted to Amazonian archæology contains a collection of pottery of the extinct Indian tribes which inhabited the region along the mouth of the Amazon at the time of the conquest.

palm fruit stands are conspicuous, the mirity palm (*Mauritia flexousa*), large enough to make a load for two men, and the bacaba palm of Para (*Oenocarpus distichus*), which has yielded no less than 40,000 of its fruit. There are also some fine specimens of the large bamboo of the upper Amazon (*Gaudua superba*).

The geological section has some interesting collections of Amazonian fossils, chiefly Devonian, from the northern shore of the lower Amazon. These were contributed by Dr. João Coelho, Governor of the State of Para, who pursued his studies as mining engineer in France, and who is one of the most distinguished lovers and connoisseurs of Amazonian nature.



VALUABLE RUBBER TREES.

A portion of the Botanical Garden showing collection of rubber trees. Some of these are of great industrial value, especially the species of *Hevea*, of which the garden possesses the richest collection in the world.

The collections which are exhibited to the public are, however, not the most important of the museum. The lack of space has rendered impossible the display of many valuable specimens, which are now kept in boxes until a new museum building shall be constructed.

There are also the purely scientific collections, containing numerous types of new species described by the members of the scientific staff and by European authorities. The most valuable, and perhaps best arranged, of these collections are the ornithological, which consists of nearly 6,000 specimens of Amazonian birds, the hymenopterological, including thousands of specimens and many hundreds of species, and the Herbarium Amazonicum, with more than 10,000 specimens.

In the back part of the building are the bureaus, the library, and the laboratories of the chiefs of the departments. Separated from the main building by a courtyard are the workshops for botanica experiments and taxidermic operations, and a small house for photographic work. There is also the shed for the meteorological instruments. Here observations have been made without interruption since 1895, and are the most complete records of such data in Para.

The Zoological Garden, although not very large, affords an interesting study of the Amazonian fauna of vertebrates. The garden extends mainly along the western side of the museum building and through the central part of the back grounds. Near the entrance the visitor encounters a large aviary occupied by a great number of aquatic birds; the beautiful white herons, night herons, ibises, spoonbills, darters, boatbills, various kinds of ducks, etc. Several smaller cages contain rare species of parrots, the splendid colored toucans (*Rhamphastos erythrorhynchus* and *Rh. ariel*), the troupials (*Xanthornus viridis* and *decumanus*, *Gymnostinops bifasciatus*), and other interesting Amazonian birds.



AVIARY IN ZOOLOGICAL GARDEN.

Near the entrance to the Zoological Garden the visitor encounters a large aviary occupied by a great number of aquatic birds, including the beautiful white herons, night herons, ibises, spoonbills, etc.

The cage of the reptiles always attracts a large crowd, with its numerous alligators, huge specimens of Anaconda (*Eunectes murinus*), and the *Boa constrictor*. Nearby is a tank containing the noted electric eels (*Gymnotus electricus*), one of which is of exceptional length, namely, 2 meters.

Along the whole western side of the museum building are the cages for carniverous animals and the larger monkeys. In this collection are the jaguars (*Felis onca*), the pumas (*Felis concolor*), different kinds of ozelots, Brazilian foxes (*Canis brasiliensis* and *microtis*), the rare *Icticyon venaticus*. Sometimes the collection includes other interesting mammals, such as the large anteater (*Myrmecophaga jubata*) and

the curious rodent *Dinomys branickii*. Of monkeys the garden possesses always a great variety of species. Especially attractive are the large spider monkeys (*Ateles niger, marginatus* and *variegatus*), with their extremities and their long prehensile tail. They are in a large cage with the barrigudos (*Lagothrix lagothricha*).

Behind the museum building are several cages of small monkeys, rodents, sloths, anteaters (*Myrmecophaga tetradactyla*), and birds. One large cage contains, beside other birds of prey, a splendid couple of Amazonian eagles (*Harpyia destructor*). Behind this cage is the new aquarium, which, though not very large, gives an excellent idea of the exceedingly rich freshwater fauna of the Amazon. Close by are divisions for the Brazilian otter (*Lutra brasiliensis*), wash bear (*Procyon cancrivorus*), and the Amazonian land tortoises or jabotys (*Testudo tabulata*), two of which are enormous specimens, probably more than one hundred years old. On the other side of the principal avenue which leads through the back part of the zoological garden a lofty and artistic house harbors a stranger to these parts, a very fine young female chimpanzee (*Troglodytes niger*). This specimen is the only survivor of five monkeys which were brought to the Amazon by a commission of the Liverpool School of Tropical Medicine for experiment and study of the yellow fever and its infectious possibilities. Although an intruder among the native inhabitants of the zoological garden, this monkey is one of the favorites of the public. On both sides of the central avenue are open-air cages for the agoutis, the coatis, and the curious *Cercoleptes caudivolvulus*, a small arboreous bear-like animal with long prehensile tail. Farther along, one in front of the other, are two cages, interesting for the contrast they afford, the one containing large aquatic birds of the island of Marajó, various storks (*Ciconia maguary, Tantalus loculator* and the large *Mycteria americana*), and herons, most of them with white or clear plumage; the other with the large forest birds of the gallinaceous family, the beautiful currassows (*Mitua mitu, Crax pinima*, etc.), the faisan-like guans or jacús (*Penelope pileata, superciliaris*, etc.), and the curious trumpeters or jacamins (*Psophia leucoptera, crepitans, viridis*, and *obscura*), all with darl plumage adapted to their surroundings. The largest inclosures are occupied by the tapirs (*Tapirus americanus*), the wild pigs or peccaris (*Dicotylus labiatus* and *torquatus*), the capiveras (*Hydrochoerus capivara*), and deer (*Coassus rufus, Cervua campestris*). In the short space of half an hour a visitor can see here a great many more of the animals inhabiting the Amazon region than he could in several years traveling through the country.

The botanical garden of the Museu Goeldi, like the zoological garden, is not a separate institution, but an integral part of the museum. It serves as an inclosure to the other parts of the museum and represents the natural surroundings of them. In 1895, when it was first started, there was only a small area (less than 1 acre)



INDIAN WAR CANOE.

The ethnological exhibit contains the large war canoe of the Carajas Indians of the river Tocantíns. This remarkable canoe is 18 meters long and 1 meter wide and is made of a single stem of the cedro tree.

available for the collection of Amazonian plants. Later the ground was extended, so that it now occupies about 3 hectares. This area is, however, much too small for the proper display of the abundantly rich Amazonian flora. But even in this limited space the botanist will find a surprisingly large number of interesting species of the Amazonian plant life. As a general rule the plants are arranged according to their genus. In the foreground are arranged Cryptogams, Gymnosperms, and monocotyledoneous plants; the eastern part of the garden is occupied by the families of the Archichlamydeæ and the western part by the Sympetalæ.

The garden in front of the museum building, where the principal Amazonian palms are planted, is adorned by two monuments. One



VIEW OF BOTANICAL GARDEN.

Within the boundaries of the Botanical Garden will be found a surprisingly large number of interesting species of the Amazonian plant life. In the reservoir the *Victoria regia* (the gigantic water lily of the Amazon) is successfully cultivated.

of them was erected by the governor, AUGUSTO MONTENEGRO, in commemoration of the founder of the Museu Parasense, D. S. FERREIRA PENNA; the other was presented to the museum by the Academy of Sciences of Bavaria, and is consecrated to the memory of the two Bavarian naturalists, J. von SPIX and C. von MARYIUS, who traveled through the Amazon regions in the early part of the last century. There is also an ornamental water reservoir and an artificial lake where the *Victoria regia*, the gigantic water lily of the Amazon, is successfully cultivated. In the lake the Amazonian turtle (*Podocnemis expansa*) and the pirarucú (*Sudis gigas*), two of the principal foodstuffs of the Amazonian people, are kept; sometimes also the manatee (*Manatus australia*).

Among the numerous palms growing in that part of the botanical garden many are of particular interest either because of their appearance or commercial importance. The assahy palm of Para (*Euterpe oleracea*), a very beautiful palm growing in great abundance on the islands along the mouth of the Amazon and whose fruit affords a refreshing beverage, is well represented by many specimens; also the genus *enocarpus*, which, too, furnishes a favorite drink in the country. The mirity (*Mauritia flexuosa*) is also one of the most important palms of the Amazonian estuarium. Curious palms are the pachiúbas (*Iriartea exorrhiza*), whose stems are supported by a pedestal of spiny aerial roots and whose leaflets are broader than in most palms, and the ubussú (*Maniearia saccifera*), whose entire



BAVARIAN MONUMENT.

This monument was presented to the museum by the Academy of Sciences of Bavaria and consecrated to the memory of the two Bavarian naturalists, J. von Spix and C. von Maryius, who traveled through the Amazon regions in the early part of the last century.

leaves are the best for house thatching. There are also some fine specimens of the urucury palm (*Attales excelsa*), whose fruits are used for rubber fumigation, the yarina or ivory palm of the upper Amazon (*Phytelephas macrocarpa*), and the bombonass of eastern Peru (*Carludovica palmata*).

It is impossible to enumerate here all the interesting trees and shrubs cultivated in the botanical garden. Some of them are of great industrial value, as for instance the species of *Hevea*. Of this plant the garden possesses the richest collection in the world. The experimental garden, originally designed for experimental cultivation of plants having a commercial value, is wholly occupied by the various Amazonian rubber trees, chiefly species of *Hevea* and

*Sapium.* Many hundreds of plants collected in different parts of the Amazonian basin await transplanting in the grounds to be added to the botanical garden. In the background of the museum the garden continues with many interesting trees, such as the Para nut tree (*Bertholletia excelsa*), the tree of the tonca bean (*Dipteryx odorata*), and other Amazonian timber and fruit trees. There is also a collection of native medicinal plants and of the species of Theobroma indigenous in the Amazonian region.

In spite of the limited staff connected with the institution the scientific life of the Museu Goeldi has always been an active one. Evidence of the amount and value of work is shown in the five volumes of the "Boletin," which are completed, by the "Memorias," the iconographic publications "Album de Aves Amazonicas," and "Aboretum Amazonicum," issued since 1894. It is true that there is, perhaps, nowhere in the world a better and more interesting field for scientific investigation along the lines of natural history than in the Amazonian region.



# TRAVEL NOTES IN CENTRAL AMERICA[a]

PUERTO CORTES, HONDURAS,
*October 24, 1910.*

*To the Editor.*

DEAR SIR: I have been obliged to come to this place unexpectedly, but it is not on the line of travel as I usually plan it. To cover the better part of Central America, the more direct route is through Honduras from south to north, as I shall explain later on. Probably this digression explains also why I have not received word from you about my last article, yet it is by no means uncommon for me to be even weeks away from my mail, especially if I expect answers to letters, although direct postal connection in Central America is improving remarkably. Be that as it may, I send this contribution on, in case you decide to use it immediately after the second article, if that is printed.



THE BRIDGE OVER THE RIVER CHOLUTECA.

Between Tegucigalpa, capital of Honduras, and Comayaguela, a suburb but an independent municipality. One of my mules ran away from me on this bridge, and I clattered across it in chase after the animal, with noise enough to frighten out the garrison. To the left, just above the end of the bridge, is the National Palace. The city is surrounded by mountains, and the streets are so precipitous that one must walk or ride an animal. There are no carriages for hire in the entire place.

At the present moment a discussion of conditions in Nicaragua has but temporary value, and that is the reason why I have not stated at greater length the character of the money in that Republic. The paper *peso* is the only unit of value, and does not seem to have much of a foundation for its exchange. There is really only one bank in the whole country. This is in Managua and has correspondents in the larger towns. The substantial commercial houses which do an import and export business, buy and sell money, and deal in exchange. If they have any standing at all, they can be thoroughly trusted. The advice of the American consul or consular agent in this regard is the best guide.

[a] By Viajero.




TRAVEL MAP THROUGH NICARAGUA, SALVADOR, AND THE INTERIOR OF HONDURAS. THE SOLID LINES SHOW THE RAILWAY, AND IT WILL BE NOTICED, THEREFORE, HOW MUCH TRAVEL OFF THE RAILWAY IS NECESSARY TO REACH SOME OF THE MANY IMPORTANT COMMERCIAL PLACES IN THESE THREE REPUBLICS.

Besides the paper *peso* there are the silver, nickel, and copper subdivisions and the multiples of the *peso*, all dependent upon fluctuations. The assumed value of the unit is $0.386 gold, which is the silver basis of the coin, but when I was last in Nicaragua the American dollar was good for 8 *pesos* at least and might at any hour bring more. Prices of daily commodities remained, of course, the same, so that living is cheap so long as it depends upon local products, but comparatively dear when the cost refers to articles imported from abroad. For that reason business is dull and sales are slow. The additional factor that political conditions are unsettled must also be taken into consideration.

But when Nicaragua once more is a peaceful country; when a stable government is established and the people can return to work; when the naturally immensely productive capabilities of the land are utilized, then there will be a boom in the Republic. The natives are intelligent and energetic. They are not afraid of work, and instinctively they prefer industry to war. They have suffered from a generation of unrest. But in these days of ambition for material progress and growing disgust (*desprecio*) for war, they can not much longer be denied the right to work. Every prospect is brighter than it was a year ago, and the promise for the future is the best for years.

I am an optimist in my interpretations of Latin America. I believe in the people and in the country. I think that even the very fact that Nicaragua has so long been deprived of her physical rights is a point in favor of her growth when the time comes. To-day she is one of the most backward of all the American Republics. The cities of Granada, Managua, and Leon, by nature fitted to be centers of culture and wealth, are woefully undeveloped. They lack almost every essential of modern municipal life. Electric lights there are, but no street-car service (Granada's poor little local tramway has been abandoned). They must have drainage, water supply, paved streets, and scientific plumbing. The country is rich. Sugar, coffee, cattle, and timber by no means exhaust the resources. Bananas are profitable on the east coast, mines are known to exist toward the north, and the western portion has for centuries rewarded those who even scratched the soil. Trade conditions at the moment are bad, I confess, but the man, company, or nation showing faith in them now will not lose in the long run.

This should be a hint to business men and capitalists. With good government the finances will be adjusted. The people will produce, and as soon as they begin to sell they must buy. The market deserves study, and I shall continue to give attention to it.

Nine weeks had already gone before I left Nicaragua for Salvador. Probably an explanation will be demanded of my reason for placing the Republic of Salvador next after Nicaragua, instead of Honduras, which geographically lies immediately between the two. If the traveler wishes to work Honduras only at the port of Amapala, and if he is lucky enough to catch a steamer northbound which stops at Amapala, and can then, after a wait of several days, catch another steamer of the same obliging habit, he can visit that port intermediately. Or if he can not wait for the scheduled steamer—sometimes Amapala is skipped anyhow, schedule or no schedule—he can cross the Bay (Gulf) of Fonseca to La Union, in Salvador, where there are good opportunities, and take the steamer at that point.

In my opinion, however, that route is unsatisfactory, because it enters Salvador at the back. Of course La Union should be visited, and it is a shame that the people in that neighborhood, including, too, the prosperous interior contiguous to La Union and San Miguel, so seldom see an American commercial representative. But the wisest and the shortest way to get the best out of Salvador is to strike direct for the capital through the port of Acajutla, visit the western part of the Republic, and then to cut across the country over the cart roads, through San Vicente and other distributing points like Chinameca and San Miguel, to emerge at La Union. From this port it is

easy to cross to Amapala in Honduras, and, without dependence on a steamer, to do that place, cross the interior of the Republic through the capital, Tegucigalpa, Comayagua, San Pedro Sula, and Puerto Cortes, from which port on the north coast it is possible to find frequent transportation to Puerto Barrios, in Guatemala. All that Republic then lies open to the traveler without further inconvenience. How to do it is what I want to tell about.

The steamer leaving Corinto, Nicaragua, in the afternoon arrives at La Union, Salvador, early the following morning. It stays there all day. This gives time to go on shore and look over the ground. La Union lies in a beautiful bay, almost landlocked, but on that account a safe harbor, although vessels of more than shallow draft must anchor quite a distance off shore, as there is not depth enough close to the little pier. La Union itself is an active place, being the only port of entry for a large consuming population in the interior. Just now it has taken on new life because of the railway building toward San Miguel. This line may ultimately stretch across the Republic into Guatemala.



THE CUSTOM-HOUSE AT AMAPALA, HONDURAS.

Amapala is the chief port of entry for the trade of the Republic. The road to the interior and the capital is so much better from the south and the Pacific that even goods from the United States are sent preferably over this route. From Amapala the traveler must cross to the mainland by boat to reach the road leading to Tegucigalpa.

Next to La Union, in the steamer's itinerary, comes La Libertad. This is only an open roadstead, and of importance chiefly because it is an outlet for a rich agricultural district, and may some day be the terminus of a railway from the capital, to which the distance is short, but over a rather steep range of mountains. The real port nearest to San Salvador is El Triunfo, but its harbor facilities need improvement before they can be made available.

After La Libertad is Acajutla. This is the great inlet and outlet of Salvador's commerce, for the railway runs between this place and San Salvador, tapping on the way the prosperous towns of Sonsonate, Santa Ana, and others of lesser size. Every one of these places is worth visiting. They buy everything from a grand piano to garden seeds, but personal solicitation is needed to get the merchants to turn a friendly eye toward the United States.

Landing at Acajutla is still by heavy rowboats or barges, for the port is really nothing but an open roadstead in which steamers must lie quite a distance from shore, partly on account of lack of water, but largely because of the heavy swell or roll of the Pacific, which makes loading and unloading from the pier into deep seagoing

vessels a difficult matter. The method adopted is to lay the barge close to the pier; from this latter a swinging basket is let down by a crane into the boat; passengers step into the basket, cling to the hand-rail, the signal is given as the boat sinks after a swell passes under it, and the lift is cleverly executed before the next swell arrives. I have described the maneuver more clumsily than it is performed, I know, but I wish to call attention to it, because information on this point ought to be clear to the person traveling on the west coast of Central America. He can prepare his baggage with this in mind. Just let him remember what I said about trunks and their weight and he will have no trouble. I have seen huge boxes unloaded at Acajutla, usually without accident, for the winch boys there are as clever as you please, but sometimes it is impossible to handle these cumbersome packages quickly, and then they strain at the joints and bump the surrounding furniture unmercifully.

Steamers plan to reach Acajutla early in the morning, so that passengers may land in time to catch the 10.15 a. m. train. A fee is charged by the wharf for each person and piece of baggage, amounting to about $1 gold for each passenger and his ordinary baggage.



THE PIER AT LA UNION, REPUBLIC OF SALVADOR.

La Union lies on a beautiful landlocked bay, but only barges can reach the pier on account of the shallowness of the water near by. At the land end of the pier is a fine new custom-house. Some distance along the shore is the beginning of the railway under construction to the interior city of San Miguel. One of the most delightful rides of my life was from this pier across the bay to Amapala, in Honduras.

I used to think that Salvador money was hard to understand, and that it was unstable, but I don't find it so nowadays. The silver *peso* has an established value of $0.382 gold, but it hardly ever reaches that price. The method of quotation in the banks of the Republic is to assume this *peso* at the normal price of 100 *centavos;* the premium on the theoretical gold value is then added, as 180 or 190, or whatever it may be at the time. The statement is consequently made that the *peso* rates at 280, or 290, etc. Being interpreted this quotation simply means that a gold dollar—for all quotations in exchange are based on the American gold dollar—is worth 2 *pesos* and 80 *centavos* (2.80 *pesos*). I reckon roughly about 3 *pesos* to the dollar, but of course in business figuring a much more exact calculation must be made. Fluctuations occur from day to day, but any bank will give a diagram of the exchange for the last five years or so, yet, taking it all in all, Salvador money does not vary unreasonably.

I am afraid that I am not getting on very fast in my "travel lessons," and I should like to keep on talking about little Salvador. It is such a delightful country, the people are so cordial and energetic, their products so abundant, and their consuming

capacity so great in comparison to the size of the Republic, that very much more attention should be given to Salvador than is at present the case.

The capital, San Salvador, is only six hours by a splendidly equipped and managed (British) railway from Acajutla. My advice is to make San Salvador headquarters, and from there to return for a week or two, according to conditions, to Sonsonate, Santa Ana, and whatever other cities promise good opportunities.

This is as suitable a place as any to give the approximate population of the chief cities of the Republic. San Salvador has about 60,000 inhabitants; Santa Tecla or Nueva (New) San Salvador, 18,000, a pretty and healthy suburb of the capital, connected with it by a short railway that makes the run in forty-five minutes, and by an almost completed automobile avenue; Santa Ana, 53,000; Sonsonate, 17,000; La Libertad, 3,000; Acajutla, 1,500—all of these cities can be reached from the capital, although only by horseback to La Libertad. Then in the eastern portion of the Republic are San Vicente, 20,000; Chinameca, 12,000; San Miguel, about 25,000, and La Union, 4,000, not to mention several others like Coatepeque, 12,000, which can be taken in only by riding through the interior, as I shall explain when I come to it.

But the size of these towns by no means gives an idea of their purchasing power. Salvador has almost one and three-fourths million of inhabitants, something over 200 to the square mile. Nearly every foot of ground is cultivated, and the people live in a modern way; they like good clothes, good food, and good tools, and will pay for them. Just how to get at them personally, is what I am trying to tell my friend who plans to do Central America in three months.

Of course, it is easy to stick to the railway, and thereby to visit the western towns mentioned, but I regret to say that Americans seldom make the effort. Not more than three hours from Acajutla I know of a small "grocery store" selling all sorts of supplies for the neighboring country folk, but the only article from the "States" was cotton cloth, brought down from San Francisco. Everything else was German or English. And the reason? Simple enough. No American salesman ever passed that way to show his wares, whereas Germans and Englishmen were on hand every three, six, or twelve months, as regular as the calendar. I know of one instance where a young native, in other business all of his working day, is now selling $5,000 worth of products from only one United States factory, outside of his regular office hours, merely because he keeps in his own private house an attractive display of the articles he has for sale, and when he solicits orders can immediately demonstrate them and quote prices laid down free from embarrassing detail. The same principle holds in places off the railroad. Personal demonstration will produce results. Therefore the American must go to the smaller towns as well as to the cities, if he wishes to test the capacity of the country.

I want to take this opportunity to say that in all the cities on the railroad hotel accommodations are excellent. I have paid at the rate of 5 to 8 *pesos* ($1.75 to $2.50) a day. which includes coffee with fruit—occasionally eggs—in the morning, and two good meals, *almuerzo* and *comida*, one at noon and the other in the evening. Usually there is a bathroom with at least a shower, free to guests.

For the ordinary man a week in the capital, San Salvador, is none too long. He may, by good luck, visit Sonsonate, Santa Ana, and the western towns, within a second week. This adds two weeks to the nine already spent. To reach the eastern towns lying between San Salvador and La Union is another matter. To return to La Union by steamer from Acajutla accomplishes nothing, for the three or four days on the way are wasted, and to enter the interior from La Union means to do exactly as much work as if one went overland. Perhaps I can make this clear if I describe my own trip, the last time I went over the ground.

I left San Salvador one Sunday afternoon shortly after 3 o'clock. My destination was the little Lake Ilopango, scarcely 8 miles from the capital, but such a beautiful place, hidden away beneath the mountains, the water so fresh and clear, and the




THE GOVERNMENT ROAD BETWEEN TEGUCIGALPA, CAPITAL OF HONDURAS, AND THE SOUTH COAST OF THE REPUBLIC.

This was a splendid macadamized highway at one time, and can be repaired to its original condition at a moderate expense. I have heard that the Government is about to do so. In most places it is 33 feet (10 meters) wide, and narrows only in cases of necessity. For most of the distance automobiles can even now go over it, but a bridge or so out of repair, and a landslide occasionally, have put it out of service except for oxcarts and pack mules. I have seen carriages on the road, but there is no pleasure riding in them. Honduras has no more than half a dozen automobiles at most.

modest hotel so clean and inviting, that it was worth the extra half day I gave to riding there, so as to get an early start on the Monday morning.

My outfit was 1 pack mule, more heavily loaded than I liked, 1 *mozo* as guide and caretaker, and my own mule. For everything I agreed to pay 80 *pesos* ($25) to carry me as far as San Miguel by any route I chose, so long as I arrived there by Friday evening. I was to pay for all meals and lodgings of myself, the boy, and the animals on the way, but what they consumed going back to San Salvador came out of the stable keeper's pocket.

There are several good-sized towns between San Salvador and San Miguel, but it is hard to visit them all in one trip. Coatepeque, for instance, is one of the most thriving places off the railway; Alegria is not to be ignored, but for good reasons I selected the road through San Vicente and Chinameca. One deciding reason was my wish to go over the new highway (*carretera*) almost finished now between the Lake Ilopango and San Vicente, which will make travel much more comfortable and quick through the interior, and bring the two cities nearer together.



THE UBIQUITOUS CART OF SALVADOR.

The Republic of Salvador is covered with a network of cart roads (*carreteras*), some bad but most of them good. The oxcart is the chief means of transport, and I have met 100 of them in a day. The cart in the picture I had to hire one day when my mules got sick. The women were my hostesses at breakfast (*almuerzo*) in the cottage, and their charm of manner would have been creditable to a London drawing-room. Just around the corner is a telephone station from which I sent a message 25 miles away as easily as I could have done from Washington to Baltimore.

I wish I could describe that delightful ride. The few inconveniences of getting up before sunrise, of simple meals at village inns at midday, of steep hill climbing or dipping deep into intervening valleys, of crossing mountain streams rushing above the animal's knees, of holding my feet high against the saddle and yelling constantly at the boy that my precious baggage must be kept safe at all costs—these are forgotten in an instant; but the memory of clear, starlit mornings, of the pleasure of the hour's rest in the shade during the noon's heat, of the arrival tired and hungry at the end of the day after sunset at some decent *posada* or hotel, to find a cheery welcome, not alone as a paying guest, but as a fellow human who adds one more to the company, for that is the way the Latin esteems the traveler—these impressions, with the vivid pictures of green mountains and valleys, of cornfields, coffee *fincas*, palms, ferns, and cactus are never forgotten. I pity the man who can not weigh one against the other and feel that after all Central America is a mighty pleasant place to travel in, whether it be for pleasure or for profit.

In these cart roads of Salvador I have spent many pleasant days. The new highway between the lake and San Vicente is splendidly constructed. It is 25 miles long and climbs to a height of 2,100 feet. At the beginning it encircles a hill in several spirals, the view of the lake from the top being glorious, but every foot of the way is negotiable by an automobile, and I think that if it is kept in repair this one feature alone will be a strong factor in popularizing that vehicle in Salvador.

From San Vicente eastward the road is not so good, and although called a cart road (*carretera*) its usefulness is really limited to oxcarts of a primitive kind, or to a two-wheeled buggy. I should hate to pass over it in a carriage. This remark applies to the rest of the way also as far as San Miguel and thence to La Union. Some stretches may be smooth, well graded, and broad, but suddenly a hill rises in front, deep ruts are met, and the road narrows to space only for two wheels between rocky walls or on the edge of a precipice.

This unserviceableness of the road is particularly evident between San Miguel and La Union, a distance of 40 miles (64 kilometers). This too is the most used portion




THE MODERN LITTLE TOWN OF CHINAMECA, REPUBLIC OF SALVADOR.

Chinameca has about 12,000 inhabitants, and is a clean, well-kept, and active place, toward the east of the Republic. It possesses many modern buildings of this type, and the shops are supplied with attractive imported goods. Lying at the edge of the growing coffee district, and about to come closer in touch with the outside world through the new railway from La Union on the coast, Chinameca promises to become an important commercial center for a large consuming district.

for carts carrying freight into the interior from the port and from the higher lands down to the port. All sorts of merchandise go to the thickly populated areas east of the Lempa River, and the mines (near San Miguel) send down their ores, accompanying a stream of carts with coffee and other native products for export.

I have passed 30 carts in an hour groaning their sluggish way along, the patient oxen hauling them slowly over huge rocks or through deep ravines, the dust inches deep in the crevices, or the mud in the rainy season even deeper. Yet the traffic increases and the road grows worse. There is now building a railway from La Union to San Miguel, with promises of extending farther into the country, to tap the rich region hitherto dependent upon such cart roads alone. This will be a godsend to half of Salvador, which had been confined to carts for all their means of traffic.

La Union is the safest harbor in the Republic. Lying completely protected in the Bay of Fonseca, it is decidedly better than the open roadsteads of the Pacific. Lack of deep water is the only inconvenience, but loading is easier, because there is no swell. It really serves the eastern half of the Republic, and a very ambitious half,

let me tell you, for the people east of the Lempa River believe in themselves, and will not be subordinate to the older and better known western portion. They have very little notion of Yankee goods, however. A traveler from the United States is almost unknown. Germans, Englishmen, and others from Europe are not afraid of the rocky road from the coast, and they meet success. In fact, I think that any man can find profitable markets all through this neighborhood if he goes after it actively. I have not mentioned all the towns, by any means, which deserve a visit. I could write a whole article on Salvador for Americans, but I must hurry away from the subject in order to keep my promises and to try to reach my destination within the appointed time.

I can not leave the dear little country, however, without paying a merited compliment to the courtesy of the inhabitants. They are cordial, unaffected, and hospitable. Spontaneous kindness is characteristic of them. I must mention also the admirable development of the telephone throughout the country. It is possible to



LAKE ILOPANGO, REPUBLIC OF SALVADOR.

One of the most beautiful bodies of water in Central America. It is a simple fashionable resort for the people of the capital, who ride out for the "week-end" pleasures. A gasoline launch crosses the lake every other day or so for connection with the highway to the city of San Vicente. The road is splendidly constructed, perfectly adapted for the automobile, and strikes through the heart of the Republic toward the eastern section. I crossed the lake with my mules in a barge towed behind the launch, my baggage stowed at one side ready for packing when shore was reached. The lake swarms with ducks, and this region should be the hunter's delight.

telephone from one end of the Republic to the other. I have come into many a small hamlet hardly big enough to be called a village, and at the corner of the *plaza* is sure to be a telegraph station, but in not a few instances the same tiny office will have a telephone box at one side, from which, as easily as from New York City to Philadelphia, a message can be spoken 100 miles away.

It has taken me a week to travel from San Salvador to La Union, during which I visited four good-sized towns. I ought to have spent two weeks on the way, and to have taken in two or three more. To cover the district thoroughly not less than two weeks should be allowed, and that is hurrying. There is no American consul outside of the capital, and very few American residents. The salesman can therefore get no help from such officials, and must trust to the friends he may make and to the banks, which will give him practical advice.

My expenses, including the cost of the mules and guide, as explained before, amounted to $60. Now, if I had taken the steamer along the coast from Acajutla to La Union I should have paid from $15 to $20, besides the cost of embarking and land-

ing, and I could have visited only the two ports, one of which I had already seen. From La Union I should have been obliged, in order to accomplish anything, to go inland up hill, and let me tell you that up to San Miguel is a good sight worse than down to La Union. Allowing two weeks for my trip, it cost me only five days extra, at a gain of three cities. I reckon, therefore, that my way is in the end most economical, both as to time and money, if results are the thing that counts.

But the "rough riding" is by no means over yet in Central America. I have still to go through Honduras.

The average traveler contents himself with taking the steamer from a convenient port, stopping a few hours in Amapala, and hurrying away. That is a false and unprofitable plan of doing it. Merely passing along the coast would make me cover the same ground twice, and also skip the very portions of a country most open to opportunity for the introduction of American goods. I am trying to outline a trip to cover the ground, not merely to skim along beaten paths already worn out by the traveler.



ON THE HIGHWAY, REPUBLIC OF SALVADOR.

This road is 25 miles long (39 kilometers), has a minimum width of 20 feet (6 meters), and is often wider. It passes through a thickly settled part of the Republic, the country being highly cultivated. Some splendid engineering work has been done, and every foot of the finished way can be traversed by automobile, although there are differences of elevation of 1,000 feet (304 kilometers) within a couple of miles, the ascent being managed by spirals around the hills. One of my pack mules is just back of me. I am ready for the journey after a breakfast (*almuerzo*) in the native cottage by the roadside.

In La Union it is possible to hire a gasoline launch, either from there, or by telegraphing across to Amapala, to take one into Honduras. The cost is the same, no matter where the launch comes from. I have paid 25 *pesos* (about $8) for the passage. By steamer it would cost less, provided the steamer happened to leave La Union when you wanted it and was going to stop at Amapala. The launch can be usually secured on twenty-four hours' notice. It is about 20 miles across the bay, shorter by launch than by steamer, because the former can cut through channels too shallow for the latter. I left La Union a few moments after 10 in the morning and arrived at Amapala just before 1 in the afternoon. The bay is almost always smooth, but toward midday a smart breeze comes up, which is trying for small craft. The early morning is therefore the best time for the trip.

Amapala is a pretty town of perhaps 4,000 inhabitants, lying under a mountain, on an island. It is also a relatively clean seaport, with little of the tropic surroundings so characteristic of Colon or Corinto. There is not an American in the place, all of the business being in the hands of well-organized European companies. They

control the imports and exports, most of which come from Germany, but they are not at all averse to buying or shipping goods from the United States, if reasonable inducements are offered. However, the mistake made is in supposing that the interior is not worth visiting and that all the purchasing is done at Amapala. No wonder that the people of Honduras know nothing about us if our commercial endeavor is limited to the coasts. I have crossed from south to north through the Republic; that is, from the Pacific to the Atlantic; and this is the way to do it.

Amapala is on an island, about 20 miles from the main station—San Lorenzo—at the end of the highway to the capital, Tegucigalpa. San Lorenzo can be reached by the mail boat, which is rowed across at intervals, varying according to the tide. This passage is cheaper, although it may cause awkward delays. The surer plan is to hire a gasoline launch from one of the large commission firms, which will then make the trip according to one's convenience. A special permit used to be demanded by the *comandante* of the port for departure after sundown. These last two conditions add something to the ordinary cost. I have paid 25 *pesos* ($8) to cross after



HOTEL NUEVO MUNDO IN SAN SALVADOR.

San Salvador, the capital of the Republic of Salvador, is a city of about 60,000 inhabitants, but with its contiguous population may be estimated at 100,000. It has several pretty plazas near the center, and most of the commercial houses face these plazas. In such a city as this, business is specialized to some extent, but many stores handle general merchandise of great variety.

dark against the tide. I should add here that the money of Salvador is quite good in Amapala for such expenses, and that it can be exchanged for Honduras money at par. The commission men at the port will cash a draft or purchase American paper and gold, with only slight discount.

At San Lorenzo mules, horses, or even a carriage, can be obtained for the trip to Tegucigalpa. Or rather, they are met here, but they must be ordered in advance while in Amapala, either by telegraph or letter, according to necessity, from Pespire, 15 miles up the road, and the first town of any importance near the coast. Each animal costs 10 *pesos* ($3) from San Lorenzo to Tegucigalpa, to which fodder and bedding must be added. The livery stable *señora*—it is a lady in this case—is entirely responsible and trustworthy. A bargain struck with her will be kept.

In Honduras the *mozo* (servant) who acts as guide and looks after the animals receives the same reward as the price of a mule. He does not need a *bestia* of his own, but always runs along on foot, keeping up a dull or a smart pace for hours, and able to cover 20 to 40 miles a day without exhaustion. They are as a rule good faithful boys, they know

every step of the way in daylight or darkness, they are acquainted with the people along the road who have accommodations for travelers, and they are helpful in many respects.

The distance from San Lorenzo to Tegucigalpa is about 60 miles (96 kilometers). When the road was built it was splendid and automobiles bowled along over it within twenty-four hours. When I last negotiated it, however, it was sadly in need of repair, and in places it was simply impassable for anything less substantial than a native oxcart. I understand that the Government is now reconstructing the road, so that the automobile service can be resumed. I advise the traveler, nevertheless, to prepare for the steady mule, as sure to get him there.



LOADING AND UNLOADING FREIGHT AND PASSENGERS AT ACAJUTLA, REPUBLIC OF SALVADOR.

The port has a first-class pier, but steamers must lie some distance away from it and deliver or receive by means of barges. The process is the same when the pier is reached, an advantage being that only the barge moves. Passengers and ordinary boxes can be easily handled in this basket, but bulky packages may cause considerable trouble. The shipper must bear this in mind when filling an order for any place in Salvador.

A good horseman, well equipped and seasoned, may do the distance in two days—that is, from early morning of the first day to the evening of the second day; it has been done between sunrise and sunset, but that is "going some." The usual arrangement is to leave San Lorenzo, where there is a funny little tavern, with simple cot beds and meals at all hours, before sunrise; that brings the traveler to Pespire about 10.30 a. m. Here breakfast is taken and a rest till early afternoon, as Pespire is awful hot. The meal is respectable, and that's all. From Pespire is a long, hard jaunt uphill, with some beautiful scenery as consolation, to La Venta, which I myself reached at a little after 10 at night. Good rest and refreshment in this rather pretty village are the rule. It grows cold at this elevation, for the road has by this time

climbed to 2,500 feet, a blanket being necessary at night, and even at midday the sun is not uncomfortable. This day is the hardest. The second day finds the road better, while the heat and dust of the lower, coast portion, are left behind.

From La Venta onward it is uphill and down dale about all the way. I started just before sunrise, reaching Sabana Grande for an early breakfast. From this place, which is a lovely oasis among the mountains, there are kilometer stones, beginning at number 55, to mark the way to Tegucigalpa. This is at the edge of the mining region, but few habitations are passed, as the land is not very fertile hereabouts. In fact, the southern side of the capital, although much the more traveled, is by no means the richer agriculturally; north of the capital, especially beyond Comayagua Valley, astonishingly rich grazing and farm lands are in evidence, with more yet not numerous native villages.

Honduras is lonely, *triste* as the Spanish say, and no portion of the Republic illustrates the feeling stronger than this great, winding road to Tegucigalpa. I went along it by moonlight one night, dipping deep into a valley through pine forests, rising over the mountain to the dividing line beyond which lay another deep *barranca*. The moon, bright as it can be only in the Tropics, flooded the high ridges with silver, leaving in utter mist laden blackness the stretches through which I had to pass. Never the sign of a hut or hamlet; no sound, even, to disturb that stillness except the steady footfall of the mule that carried me. It was awe inspiring. I hardly dared speak to my *mozo*, plodding along a few paces in advance. When I lit my cigarette down in the valley again the flame startled me, and I thought of the devil's tryst in Der Freischütz, and began to wonder whatever had brought me here. Then I climbed 800 feet again, in scarcely 40 minutes, winding up and up to another ridge. Clear to the east was a faint break on the horizon, which even the moon could not hide. Before I knew it the sun had risen. Ahead of me stretched the last portion of the road, downhill now most of the way, with houses scattered here and there. My *mozo* pointed a familiar finger to the shimmering roofs of Tegucigalpa. He had never seen a railway train nor a trolley car, and was blissfully ignorant of the benefits of our industrial civilization, but that was to him *la capital*.

Then I woke from my medieval dreams and realized what reason I had had for coming. It was commerce; I was on the spot to learn what the markets were, what the people wanted, and whether the United States could offer anything the purchasers of Central America would buy. I was not ashamed of my poetry, but I was again in the twentieth century, where poetry and business can be combined, and I was about to enter the only capital of Latin America which had never heard the whistle from a locomotive.

But my space is exhausted. It has taken me practically a week from La Union to Tegucigalpa; 4 weeks were given to Salvador; 9 weeks before that I left New Orleans—14 weeks in all, and I still must make the trip across country to Cortes and thence to and through Guatemala. All this, however, I shall try to tell about in my next and last letter, and end it with a few hints about business in general, and the manner of going after it.

VIAJERO.

# EDUCATION IN PORTO RICO[a]

WERE you to visit the island of Porto Rico and traverse any considerable portion of its more than 1,000 kilometers of macadamized roads, next to the beauty of the scenery and the boundless fertility of the soil you would be impressed with the number and perfection of its public-school buildings. They seem to be everywhere, some large and imposing, containing more than 20 rooms and costing many thousands of dollars; others, the simplest of structures—thatch roofed and primitive in every detail, but each glorified in the purpose to which it is devoted. The island contains nearly 1,000 of these temples of learning, great and small, and to them during the past school year more than 120,000 children turned for instruction. That means that of the entire population of Porto Rico 1 in every 9 went to school, a larger proportion than for any other people of the Western Hemisphere, save those of the United States and Canada.



HON. GEORGE R. COLTON, GOVERNOR OF PORTO RICO.

The organization which has brought about such a degree of educational development in Porto Rico is largely centralized in the department of education, one of the 7 coordinate executive departments of the insular government. At the head of the department of education is the commissioner of education, appointed by the President of the United States, and to whom is given by the organic act of the island power to "superintend public instruction throughout Porto Rico." By the same act all disbursements for educational purposes must be

[a] Hon. EDWIN G. DEXTER, Commissioner of Education.

approved by him. In each of the 66 municipalities of the island are school boards in charge of the local school interests, but the formulation of the course of study (which is uniform for the island), the certification of teachers, the examination of pupils to determine their progress, and other general powers reside in the department of education.

The salaries of all teachers, amounting to $720,000 annually, are paid direct from the insular treasury. Of the 1,743 teachers on the pay roll of the department, 815 are males and 928 are females. All hold certificates issued by the department based either upon examination or upon graduation from some institution recognized by law. The salaries are good as teachers' salaries go in the various countries of the world, the average monthly wage for the entire number, including allowance for house rent, being $49.19 for the school year of nine months. This is considerably higher than the average salary of teachers in the United States. The maximum and minimum salaries of teachers below those of high-school grade are $95 and $33 per school month.

Of the 121,453 pupils enrolled in the public schools for the year 1909–10, the distribution was as follows:

| | | | |
|---|---|---|---|
| Kindergartens | 230 | Rural | 71,630 |
| Graded | 39,907 | High | 970 |
| Night | 8,624 | Special | 92 |

Kindergartens are in the experimental stage, being maintained in the cities of San Juan and Ponce only.

### RURAL SCHOOLS.

The rural schools are by far the most numerous. With few exceptions they are located in the country districts. Although the number of such schools equipped with modern furniture and appliances is increasing year by year, still not a few remind one of the primitive New England school with its tables and backless benches for the children. In some instances substantial 1-room cement school buildings have been erected for their use, but by far the larger number are maintained in less substantial structures erected for the purpose or even in rented buildings. In no instance, however, is the same structure used for school and residence purposes. More than half the rural teachers are men, and all are native Porto Ricans. They are doing work worthy of the greatest praise in extending elementary instruction to the remotest corners of the island. In all rural schools the curriculum covers at least the first three years of instruction and in many includes the fourth, fifth, and even the sixth year. Beyond this it does not go.

GRADED SCHOOLS.

Graded-school systems are maintained in each of the 66 towns and cities of the island as well as in a considerable number of the more populous barrios. These graded schools compare favorably in all respects with the better systems of schools in the United States. They are for the most part fully as well housed, better ventilated, equally as well equipped, and I have no apologies to make for the way they are taught. They are graded the same, and pupils have no difficulty in transferring from one system to the other without loss of standing, with the advantage to the Porto Rican pupil of being bilingual. The 8 grades of the common-school curriculum are maintained in 46 municipalities of the island, while in practically all at least seven years of instruction is given. In addition to this, in 18 municipalities, exclusive of the cities in which high schools exist, a ninth year of instruction, i. e., the first year of high-school work, is given.



HON. EDWIN G. DEXTER, COMMISSIONER OF EDUCATION OF PORTO RICO.

In 49 municipalities, graded school buildings of from 4 to 22 rooms have been constructed; in all, 70 such buildings with a total of more than 400 rooms. Three classes of teachers give instruction in the graded schools, viz, teachers of English, English graded teachers, and Spanish graded teachers. The first named are Americans, nearly all graduates of colleges or normal schools in the United States. The law requires that at least one teacher of English be assigned to each municipality of the island. In some the number is considerably greater, the number of American teachers in the island being about 150. They are assigned, for the most part, to the higher grades. The English graded teachers are Porto Ricans who, through the study of the English language either in the United States or in the public schools of Porto Rico, or in the courses in English maintained by the department and taught by the teachers of English, have so perfected themselves in the language as to pass a special examination

in English given by the department. They are then authorized to give instruction in all the branches of the curriculum through the medium of English. Such teachers receive an extra compensation of $5 per school month.

Every Porto Rican teacher is required by law to pass an examination in English at the end of the school year, the course being so graded that at the completion of a series of years of instruction under the teachers of English, the English graded license may be expected. For the school year 1909–10, in 90 per cent of the graded schools of the island, instruction in all subjects (except the Spanish language) was given in English, and in the remaining 10 per cent English was



SAN JUAN SCHOOL NO. 1, PORTO RICO.

taught as a subject. This means that the graded schools are practically upon an English basis. It does not mean, however, that the Spanish language is neglected, for thorough instruction in that language is maintained from the first grade, throughout the high school. It is not my desire, as commissioner of education, to supplant the mother tongue, merely to supplement it with the language which must, in the nature of things, become more and more the language of business and commerce for the people of Porto Rico.

The third class of teachers mentioned above, the Spanish graded, are in the process of securing the English graded license, but have not as yet passed the rigid examination demanded by the department for that grade. Many of them, however, are teaching in English.



PARADE OF SCHOOL CHILDREN, MAYAGUEZ, PORTO RICO.

### HIGH SCHOOLS.

At the cities of San Juan, Ponce, and Mayaguez are maintained first-class high schools, each with a four-year course and sending their graduates to the University of Porto Rico and to any college or university in the United States without difficulty in entrance. In addition to these fully equipped high schools, partial high-school courses are offered in 18 municipalities of the island. In these various schools of a secondary grade are more than 900 students. In each of the three high schools mentioned is maintained a commercial course, in addition to the regular scientific and classical courses.

The school spirit in these institutions is good, athletic enthusiasm is intense, literary and debating societies are maintained, and everything is found which goes to make a first-class high school. The island may well be proud of its high schools.

### AGRICULTURAL AND MANUAL INSTRUCTION.

Instruction in agriculture is offered both by the University of Porto Rico and by the department of education, the former at Rio Piedras, where it maintains extended courses, the latter in 6 of the 41 supervisory districts, where work of an elementary nature is offered. In each of these districts is a special teacher of agriculture, who gives instruction to the pupils in the graded schools and superintends the work of the rural teachers in the subject. Gardens are maintained in connection with the work, and in some instances the sale of the products has placed quite a fund at the disposal of the teacher for the purchase of fertilizer, implements, etc. Sugar cane, pineapples, citrus fruits, tobacco, and vegetables are the common products. It is hoped that in the near future the work can be extended through the appointment of a larger number of special teachers. Hitherto the source of such teachers has been principally Tuskegee Institute and other agricultural schools of the United States, but the university of the island is now in a position to meet the demand. In addition to this source of supply, the summer institutes maintained by the department provide instruction for prospective teachers of agriculture, more than 150 having pursued such courses during the past summer.

In the high schools of the island and in the university courses in manual training and in domestic science are maintained. In the graded schools courses in sewing are offered, but up to the present time only to a limited extent.

It is my hope that funds may be provided by the legislature at its next session for the introduction of these subjects on an extended scale into the graded schools.




SPEAKER'S STAND AND PLAZA, AÑASCO, PORTO RICO DURING CHRISTMAS CELEBRATION, 1909.

NIGHT SCHOOLS.

During the past year night schools were maintained in 65 of the 66 municipalities of the island, in all 158 schools, with 9,624 pupils enrolled. The great majority of persons attending the night schools are adults.

But no mere description of the schools of Porto Rico can give any adequate idea of the many ways in which the educational organization is influencing the lives and customs of the people. Within two years no less than 233 public-school libraries have been established, containing more than 25,000 volumes. The grate



GRADED SCHOOL AT CAGUAS, PORTO RICO.

majority of these are simple but strong boxes (in reality condemned army kits) in circulation among the rural schools, each containing a selection of from 50 to 100 books. These libraries were established and are maintained almost entirely by voluntary contributions of books made by people of the United States at the solicitation of the Commissioner. More books are needed, especially those printed in Spanish, and the department of education (address, San Juan, P. R.) will gladly give further information regarding the movement to anyone addressing it.

Another important educational movement in the broadest sense is the establishment of fully equipped public school playgrounds. Three years ago there was but one such playground in the island. To-day there are 45, with something more than $20,000 invested in



TEACHERS' INSTITUTE, MAYAGUEZ, PORTO RICO, AUGUST, 1910.

their equipment. This consists of the best and most modern apparatus for outdoor gymnastics, such as swings, climbing poles, rings, teeter boards, ladders, basket and baseball outfits, vaulting and jumping standards, etc. Thousands upon thousands of the Porto Rican youth of both sexes are making use of these playgrounds and are developing a sturdiness of physique hitherto, I believe, unknown to school children in the Tropics. Every form of athletic interest has been fostered by the playground activity. At the interscholastic athletic meet, held in April, 1910, there were more than 200 contestants, coming from many different schools, and the records made would have been creditable to boys of equal age in any part of the world. At the contest for school bands, held in connection with the meet, nine bands were in competition.

The establishment of school savings banks is another movement to which the department has been giving its attention during the past two years, with the result that such banks are now established in 31 municipalities of the island. In them 9,404 pupils deposited $8,883 during the school year 1909–10. Of this number of depositors, 693 started individual accounts in the national or city banks of the towns in which they live.

### THE UNIVERSITY OF PORTO RICO.

In the University of Porto Rico the public-school system of the island culminates. This institution is not directly under the department of education, though the commissioner of education is ex officio the president of its board of trustees and its chancellor. It was founded in 1903, is vested by law with all the rights and privileges usually inhering in such an institution. The material equipment of the university consists of roughly 200 acres of land, something more than 100 acres of which are situated at Rio Piedras, 7 miles from San Juan, while the remainder adjoins the United States Agricultural Experiment Station situated at Mayaguez, at the western extremity of the island. No buildings have as yet been erected upon the Mayaguez property, which was purchased as a basis for the extension of the College of Agriculture. The Rio Piedras campus contains nine structures used by the Colleges of Liberal Arts and Agriculture and by the normal department. The last-named department was the first to be established by the university, and is now a prosperous normal school with nearly 300 students enrolled and as many more in the practice school.

The College of Agriculture was established in 1903, but for various reasons has not developed as rapidly as might have been hoped. In connection with the college a model dairy is maintained, with a large herd of registered Jersey cattle, a thoroughly up-to-date poultry

department, a large market garden, and an apiary, besides the departments devoted to the propagation of pineapples and citrus fruit.

The University of Porto Rico presents the logical point of academic contact between the Spanish and English-speaking peoples of the Western Hemisphere. Easily accessible both from the north and the south, located in an island which is one of the beauty spots of the world, with a climate which is unsurpassed, persons wishing to become essentially bilingual can find no better institution. The university curriculum offers more extended courses in the Spanish language and literature than does any institution in the United



JEFFERSON GRADED SCHOOL, ARECIBO, PORTO RICO.

States, and more extended courses in English than are to be found in Spanish America. And persons coming either from the north or the south will find so many persons speaking their own language that the usual shock of a plunge into a distinctly foreign environment is not felt. Already the university has students from both the North and South American Continents, and the number is sure to increase.

With the large number of people in the Spanish-speaking countries who feel the commercial necessity of the English language and the perhaps still larger number of youths in the United States who foresee a business or a professional future in Spanish America, the University of Porto Rico bids fair to become a veritable Pan American university.

# ADDRESSES BY MEMBERS OF THE GOVERNING BOARD

EDITORIAL reference has been made in this issue of the BULLETIN to addresses delivered by various members of the Governing Board of the Pan American Union. So interesting were all these speeches that extracts from each of them are given.

At the Trans-Mississippi Congress, recently held at San Antonio, Texas, the Minister of Bolivia, Señor Don IGNACIO CALDERON, after extending the greetings of the southern half of the continent to the northern half, spoke, in part, as follows:

I have no doubt that there are still alive some of those unfortunate travelers who crossed the Isthmus of Panama when that journey was made partly on the backs of mules and partly in frail canoes, necessitating many days of travel and exposure through malarial-infected swamps, the infections of yellow-fever mosquitoes and the danger of highwaymen who preyed on the passengers.

Thousands of adventurers, anxious to reach the new Eldorado in California without delay, found premature graves in the unhealthy marshes of the Isthmus. It was then that the genius and persistent activity of an American, ASPINWALL, conceived and brought about the construction of the Panama Railroad, one of the boldest and most useful undertakings. It is said that each railroad tie cost the life of a man; but in exchange millions of travelers have since been spared.

From that time onward the progress of the world has been rapid. The East and the West of the United States to-day form only an entity, completely linked and with better facilities of communication than the original States possessed at the beginning of the last century.

The great steamships that cross the Atlantic have changed this former long voyage into pleasant excursions of only a few days' length.

The development of the railroads of Europe, of America, of Asia, and of Africa have shortened the distances and brought the peoples of the entire globe into quick touch with each other.

It is not strange, therefore, that the dream of centuries, the removal of the obstacle that separates in the north of the continent the two oceans, has become a paramount necessity.

The energy and the financial power of this great Republic have again been called into action to carry out the most gigantic geographical-surgical work, as the cutting of the Isthmus of Panama was once very aptly termed by the distinguished British Ambassador, Mr. BRYCE.

Great effort and enormous capital was first expended by France and at present by the United States to accomplish this stupendous work; but who can properly appreciate the immense benefits which will result to the commercial relations of the world?

America and Asia will be thousands of miles nearer each other; the free communication between North and South America will give a tremendous impetus to their intercourse. The bringing of widely-separated countries into closer and more rapid communication will culminate in a universal transformation of the commerce of the world.

The Minister then referred to the physical obstacles encountered in the development of our foreign trade and the inconveniences experienced in travel on account of the difficulty in crossing the Isthmus. "The opening of the Panama Canal," he said, "will remove these and other obstacles."

Equally important will be the better understanding of the markets of South America by the exporters and manufacturers of this country, who will have more opportunities to study and consult the tastes and necessities of the South American people; and who will also have greater facilities for visiting the various countries and to get acquainted with the business men. Personal and direct contact is a powerful element of union and the promotion of advantageous relations.

The continent of South America is capable of unlimited development by reason of its size, the variety and richness of its products.

The total population of the 10 Republics does not exceed 60,000,000 people; but their international commerce reaches to about $2,000,000,000 annually.

Venezuela, Colombia, and Ecuador on the north are especially adapted to cattle raising. They grow coffee, cocoa, rubber and other tropical products; have many gold mines, deposits of asphalt, and other important elements for the development of commerce.

Peru already produces great quantities of sugar, cotton, alpaca wool, copper, gold and silver, and in the vast plains and forests watered by the navigable rivers, as the Ucayali and the Maranon is a country of inexhaustible resources. Chile possesses great nitrate deposits, is rich in copper and other metals; Argentina, by its agricultural and stock-raising industries, has an important and growing position in the world's commerce; Brazil, with its vast territory and great rivers, to-day supplies this country most of the coffee as well as rubber that it consumes. Uruguay and Paraguay are also countries rich in pastures and agricultural products.

My country, Bolivia, situated in the center of the continent and crossed by double chains of the Andes, watered by great rivers flowing to the Amazon and the Plata, rich in virgin forests, abundance of rubber and all tropical products, offers in its eastern plains wonderful opportunities for stock raising. The mines of silver, copper, bismuth, zinc, and tin were the principal source of wealth during the dominion of Spain. The silver mines of Potosi produced billions in the three hundred years of the colonial period, and if it had not been for the great depreciation in the value of this metal and the lack of cheap transportation the many abandoned mines would be in active operation to-day.

On the other hand the exploitation of tin has considerably increased. Bolivia being the only American country where this metal is found in paying quantities, has, I will say, the natural monopoly in its production. Last year more than 21,000 tons of pure tin were exported; and with better transportation facilities and greater working population, Bolivia, which now produces about one-fourth part of the tin needed, could easily supply enough for the world's consumption.

In order to avoid the obstacles offered by the great heights of the Andes and the distance from the coast, there was begun several years ago the construction of a system of railroads that will facilitate communication with the markets of the world.

In general there is only a faint knowledge of the progress made by the construction of a railroad in South America. A short time ago a line in Ecuador from Guayaquil

to Quito, the capital of the Republic, was opened to traffic, thus uniting the interior cities of the country with its principal port on the Pacific.

In the South, Chile and Argentina are already connected by the recently completed tunnel under the Andes, and in consequence Buenos Aires and Valparaiso are only about a day and a half distant instead of the former long and dangerous voyage through the Straits of Magellan. The railroads which Bolivia is constructing will tap the Argentine frontier, passing through a vast section of that country, and will open a direct outlet to the Atlantic from its inland sections and will, eventually, when Peru completes the building of its railroads to Lake Titicaca, establish a continuous rail route from Lima to Buenos Aires.

Bolivia and Chile are constructing a railroad from Arica to La Paz, which will put the latter city within 8 or 12 hours of the coast, thus reducing to one-third the time now required for making the trip by rail from Antifogasta in Chile or from Mollendo in Peru. The important railroads which Brazil is now building in accordance with an international agreement with Bolivia, passing around the Falls of the Madeira, will very shortly open to traffic all the section watered by the Beni and the Mamore in Bolivia, rich in rubber and other tropical products.

The construction of a railroad from La Paz to Puerto Pando will attract toward the Pacific a large portion of the commerce which at present passes out by the Amazon.

Peru and Ecuador are also proposing to build rail lines which, starting from points near the Pacific coast, will run to the principal tributaries of the Amazon; and the opening of the Panama Canal will afford a rapid and advantageous route to the Pacific for a great part of the commerce that now passes to the Amazon, thus saving 3,000 miles of travel down this river in order to reach the coasts of the Atlantic.

It is very convenient in meetings such as this congress for the leading men and all who may have an interest in promoting the business and political relations of this country with the other Republics of America, to discuss the economic questions relating to their progress, and to devise means whereby the commercial relations may be strengthened and advanced by the common efforts of all the Republics.

It is well to bear in mind that with the Latin race sentiment has more influence than mere profit, and that the intercourse with these countries must be based on mutual consideration, which so greatly contributes to render attractive the relations between countries and individuals. We appreciate the kindness received more than the dollars gained.

European exporters hold the supremacy in commerce in South America by reason of the deference paid to the desires and needs of the various markets; for the care exercised in packing, the promptness of shipments, and the granting of credits more or less extended.

If American exporters are interested in developing their relations with the countries of the south it is highly important that they study the demands, send representatives who thoroughly understand the Spanish language, exercise greater care in filling orders, and avoid delays, which unfortunately occur, rendering the goods sent of little value or even useless.

Señor CALDERON then commented most kindly on the democracy of this country, the "liberty enjoyed in its territory and the spirit of justice and respect for the rights of other countries." He took occasion to praise the favorable attitude of the United States toward arbitrating international questions:

Before concluding these brief observations I must mention the debt of gratitude that the cause of Pan Americanism owes to the Hon. JOHN BARRETT, Director General of the Pan American Union.

After the memorable voyage of the distinguished ex-Secretary of State, Mr. ROOT, to South America, and the brilliant demonstration he made in this same Congress at Kansas City, calling attention to these Republics, so little known until then, the work of Mr. BARRETT in his indefatigable propaganda in speech and in writing, illustrating the great progress of the Latin Republics, has contributed more than anything else to awaken interest and develop the good relations of all our countries.

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At the meeting of the National Waterways Congress held in Washington on December 6, the Ambassador of Mexico, Señor Don FRANCISCO LEÓN DE LA BARRA, was one of the principal speakers. Speaking of the extensive improvements of the rivers and harbors of Mexico, he said:

As I realize the spirit of loftiness and foresight that prevails in your discussions and your studies, I fully comprehend the enormous progress of your country. To resolve its financial, social, or political problems, the United States relies on the disinterested and efficient work of such of its citizens whose learning may contribute toward reaching a solution satisfactory to the interests of the Republic.

The presence here of the First Magistrate of this country—whose personality commands all respect both at home and abroad—gives a special luster to your meetings, and a stimulus which must greatly encourage you all.

The solving of your river and harbor problems is of the greatest importance to my country, not only on account of the knowledge to be derived from your studies, but also because of the influence that a wise solution may have on international commerce.

The facilities offered by river works for the improvement of navigation and of port works, which increase their capacity while affording the necessary security to shipping, must need have an influence in your international trade, as they contribute to reduce the cost and increase the rapidity of transportation.

Thus, if all the countries in the world ought to follow attentively the progress of your study of these subjects, your two neighbors, Canada on the north, and Mexico on the south—both represented here—are particularly bound to do so, and you, also, are interested in knowing what your neighbors, to whom you are bound by important commercial ties, are doing in the matter.

The principal aim of your work and efforts is the improvement of waterways in the United States, but as you also direct your attention to the consideration of your ports, I desire briefly to explain to you, in accordance with the suggestions made to me by your distinguished President, Mr. RANSDELL, what Mexico has accomplished in this line of work.

The improvement of our ports and lighthouses was imperative for the country as a complement to the network of railways built to foster industry and commerce. Because these railroads reached to the Gulf shores first, the main attention of the Government was directed to its ports, and now that the railways have reached to the Pacific coast, important works have been carried on in Salina Cruz, Manzanillo, and in other ports of that coast.

I shall mention, first, three of the Gulf ports: Veracruz, Tampico, and Coatzacoalcos, now called Puerto Mexico. The first named was justly dreaded by navigators because of the numerous reefs that made it dangerous, as well as the fact that, on account of its situation, exposed to all winds, it was but a roadstead between the coast and the castle of San Juan de Ulca. To-day it is a real port, thanks to the improvements begun on the 10th of August, 1882.

According to the surveys and plans of Don LUIS E. VILLA-SENOR, of your countryman, Captain EADS, and the French engineer, M. THIERS, the construction of the port

steadily advanced until 1895, when a contract was made with the English firm of Messrs. S. PEARSON & SON (Limited) for the completion of the works. These improvements consist of a series of breakwaters and wharves, giving the port a capacity of 430 acres, with a depth at low tide of 10 meters. Thirty ships can lie alongside of the wharves at the same time, and every necessary facility for loading and unloading is afforded. On the shore, a substantial foundation has been built, measuring 630,000 square meters, where warehouses and other Federal buildings have been erected.

I have obtained the foregoing information from a report by Engineer NICOLAU at the time the work was finished in 1902, and it appears that the cost of this improvement amounted in round numbers to 30,000,000 pesos. This will show you, gentlemen, the importance of such undertaking.

Sanitation, paving, electric lighting, etc., completed the work in a city that, being formerly infested by yellow fever, enjoys at present excellent sanitary conditions.

The port of Tampico, nearer the United States than that of Veracruz, and connected with the central portion of the Republic by a railroad which traverses very rich regions, shows a daily increase in the importance of its maritime commerce, due to the improvement done in accordance with a contract made by the Federal Government with the company of the Central Railway, which obtained a subsidy of 3,000,000 pesos to complete the work.

The method in this case was different from that followed at Veracruz. In Tampico all that was necessary was the canalization of the River Panuco and the building of two jetties, which, upon the extension of the canal, did away with the old bar.

The Tehuantepec Railway, 310 kilometers long, connecting the Gulf of Mexico with the Pacific Ocean, needed safe terminal ports of great capacity provided with all the necessary elements for facilitating rapid transit for passengers and merchandise. Such conditions were indispensable to verify the prophecy of Baron ALEXANDER VON HUMBOLDT, who, in calling Tehuantepec "The Bridge of the World," foresaw that it would be one of the greatest commercial highways of the world.

In Port Mexico, formerly Coatzacoalcos, the river of this name was canalized and two large jetties were built. Salina Cruz, the terminal port of the Pacific, has an inner harbor covering nearly 30 hectares protected by two magnificent jetties.

The cost of the work in these two ports, whose sanitary conditions are perfect, is estimated at over 65,000,000 pesos—and their wharves and anchorages are completely fitted with all the modern improvements and appliances that science and mechanical arts have devised for the convenience of commerce in the loading and unloading of cargoes. Thanks to such excellent conditions of the two ports and the Tehauntepec Railway, the results obtained since the inauguration of the line in 1907 have far exceeded expectations. The expenses of transportation of merchandise is estimated approximately at $2 per ton, thus insuring a future which grows more brilliant every day.

The port of Manzanillo, on the Pacific, now connected by rail with the capital of the Republic, has been greatly improved by a large jetty and other important works for the deepening of the bay, thus facilitating all operations of the maritime commerce.

Mazatlan, which is soon to be connected with the rest of the Republic by a railway, and Guaymas on the Pacific coast, as well as the ports of Progreso and Campeche on the Gulf of Mexico, are now being studied with the object of improving their present conditions. The improvement in Guaymas can be readily accomplished by an outlay not to exceed 5,000,000 pesos, according to the estimates submitted.

I must not tire you with a detailed account of works now finished. With what I have said, I believe I have complied with the wishes of your distinguished president, Mr. RANSDELL. In view of the fact that I have the honor to address a body of men whose lofty aims and practical tendencies have for their object the solution of vital problems in contemporary peoples, I have limited myself simply to a brief recital of facts.

By this short statement you will readily understand the efforts made by your southern sister to solve in the best possible manner most important questions in regard to the adaptation of our ports to the needs of international commerce. We have yet many problems to solve, but what I have briefly shown you will be sufficient for you to understand the spirit that leads the Mexican Government to favor and encourage all that which may be an element of progress.

In conclusion, allow me, gentlemen, to express my earnest wishes for the happy outcome of your labors, that will doubtless contribute to the increased greatness of this country, which is an example of what intelligence and labor may achieve when used in the cause of progress.

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Again, at the inaugural session of the American Society for the Judicial Settlement of International Disputes, held in Washington on December 15, the ambassador also delivered a very able speech, from which the following is quoted:

It affords me profound satisfaction to have the honor to express to you the sentiments of cordial appreciation of my Government for the lofty and noble work in which this most worthy association is so earnestly engaged. My Government is a staunch supporter of those whose efforts are directed toward aiding in the establishment of a Permanent Court of Arbitration, in the constitution of which the fundamental rights of States have not been overlooked; an institution which, because of its very elements, is a universally respected tribunal.

When such an institution has been established, free from any national or political influence, the day will not be far distant when we may in all justice make our own the generous optimistic view which led the beautiful Miranda in "The Tempest" to consider humanity as perfect, when she averred "How beauteous mankind is! O, brave new world that has such people in it!"

Caliban, it is true, will go on playing his part of the fierce, envious beast, but his onslaughts will lose some of their force, because of the great power that science and a far-reaching prudent policy will have brought to the aid of good.

I regret very much that his official duties prevent the presence here of the distinguished Secretary of State as our presiding officer. In him we recognize the sound judgment of the jurist, coupled with a clear knowledge of life as a statesman. These traits make him worthy of holding the high post you have confided to him, gentlemen, at this meeting, where there are gathered together so many minds and so many hearts, joined in one common work, a work of love and harmony.

In order that the International Court of Arbitration be assured an effective life as a permanent juridical institution, it is necessary that the following fundamental conditions be united therein: First, that its procedure be expeditious and the rights of the contending parties be guaranteed; second, that the constituents of which it is composed be respected by all civilized nations; and lastly, that the principles it is called upon to apply be clear and such as shall have merited universal approval.

The first condition has already been fulfilled, thanks to the work of the Second Peace Conference, resulting in the well-known convention. The principles upon which it rests are susceptible in some cases of advantageous modification, but such as they are established by the convention, they serve their purpose. Practice will show, later on, the changes they must undergo in order to make international justice more expeditious and of easier and surer application.

The constitution of the court which gave rise to so heated a debate in the conference that it did not permit the reaching of a definite conclusion on this subject will perhaps be agreed upon among the powers before the meeting of the next conference,

provided some system of scheme is adopted that shall take into due consideration the principle of the juridical equality of States in accordance with the teachings of modern science.

The recognition by the civilized nations of the fundamental principles of international law and a mutual agreement as to the form in which such principles should be substantially applied is the third condition necessary to secure a useful and permanent life to the international court.

I am well aware that the complete codification of international law is a slow work and has to contend against serious obstacles, but the spirit of harmony grows stronger day by day among countries, either expressed in the form of treaties and conventions or tacitly in universal practices.

In our day one of the principal aims of legal science is to formulate in a clear and precise manner the principles adopted, to do away with the cause of those international questions wherein the only real enemy is found in the form in which thoughts are expressed.

In the balance shown as the result of the examination of the favorable or adverse circumstances connected with the realization of your plans, the former factors control and eventually will conquer, as you have not cared to remain in the field of idealization, like those philosophers who pretend to legislate for a perfect humanity, thus uselessly toiling like that character in the "Tales of Hoffmann," who, seated before a white canvas wielding a brush without colors, was engaged in giving the necessary touches to paint a picture. You work in a practical, efficient manner, taking man as he is with his vices and his faults, encouraged by the deep conviction that—as your philospher, WILLIAM JAMES, but recently lost to the science in which he shone, said—"Conscience goes ever unceasingly on." Thus the world's conscience keeps its onward march, because it possesses a real life which is forever renewed and undergoes a continuous evolution.

In conclusion, allow me, gentlemen, in expressing the earnest wishes of the Secretary of Foreign Relations of Mexico for a happy outcome of your labors, to join with it my own personal desire for the speedy arrival of an era, which is not so far distant, when he who has the greatest power shall be he who has the greatest sentiments of justice.

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The sixth annual meeting of the Red Cross Society held in Washington on December 6, listened to a speech by Señor Don JOAQUIN BERNARDO CALVO, the Minister of Costa Rica. The Minister paid a glowing tribute to the American nation, and then continued as follows:

No people upon the earth have set such an example as the United States in the success of its institutions and the consequent prosperity of the nation; if we admire the surprising progress which it has attained, the world's admiration is the greater at seeing here realized, upon a greater scale than elsewhere upon the globe, what were primarily the dreams of humanity, and later, its just aspirations, since the brilliant "Star of Bethlehem" shone over the earth. This explains why every day bears to its shores thousands of people from all the old nationalities who, without forfeiting any of the good which they have left in the mother country, find here the enjoyment of much more, if not everything, that can reasonably be hoped for in life.

The nation, having become great through its own and temporarily foreign elements, the fabulous figures of its commerce demonstrate the happiness of its people; and if its commerce be a sign of its great wealth and of its cordial relations with other nations, its philanthropy is the exponent of its high civilization.

There are, in human nature, deficiencies which civilization can not correct, and there occur upon the earth accidents against which no human power can prevail; but there are in the Christian ideal sentiments of humanity which alleviate the woes of those who suffer either through incapacity or as victims of other misfortunes. In this respect the United States has distinguished itself, looking after the needy at home and sending relief to the unfortunate in other parts of the world.

Among the calamities which from time to time afflict mankind neither plagues nor the most destructive seismic phenomena cause greater injury than war; civilization is guiding us toward an elimination of this terrible evil, and in the evolution toward this Christian goal the United States of America is moving with noble courage in favor of conciliation and arbitration as a means of obliterating international questions.

It is true that the horrors of war have been to some extent lessened; but war is destruction, and so long as it is possible, an increasing tribute of tears will have to be paid for those who die, and of aid for those who survive, temporarily, or for all time, incapacitated.

This, as is well known, caused the formation of the humanitarian institution of the Red Cross, and to it the world owes most praiseworthy services. In it, woman, the angel of the fireside, has been converted into the angel of charity, and her silent sacrifices and persevering example can only be compared with her limitless self-sacrifice.

In this country the Red Cross has not confined its beneficent action to the victims of war. Here, in times of peace, and with the intelligent cooperation in particular of an illustrious woman, the philanthropic institution has held aloft its banner, and its humanitarian services have carried relief to many thousands of unfortunates on occasions of national and foreign calamities.

In the month of May of the present year, a terrible earthquake destroyed the city of Cartago, in Costa Rica, my beloved country, and, in an hour of the greatest affliction, when confusion added to the horrors of this frightful calamity, the American Red Cross was the first to make its voice of comfort heard, as the voice of Providence. Costa Rica will never forget this seasonable humane act, and in its name I have the honor, on the present occasion, to express its most profound and eternal gratitude to the President of the United States of America, who is at the head of the institution, and the other members of its administrative board, and particularly to Miss BOARDMAN and Maj. Gen. DAVIS, whose solicitude, worthy of the highest appreciation, was demonstrated so fully and with such laudable spontaneity.

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Before the Sixth Annual Convention of the American Civic Association in Washington on December 14, the Minister of Cuba, Señor Don FRANCISCO CARRERA JUSTIZ, spoke on "Cuban Municipalities and Their Civic Progress."

He first outlined the historical development of municipal improvements from the days of the Roman Empire to the present time, and then spoke of the Cuban progress, as follows:

Each country, according to its peculiar characteristics, has been making its evolution in this most interesting field of the political and social sciences. I may, perhaps, speak of my own country with the experience which is a result of the fact that I cooperated in drafting the recent organic laws of the Cuban municipalities, and perchance the legal precedents established by the Republic of Cuba may not be destitute of some interest, inasmuch as they refer to very recent laws which were written in view of the latest improvements made in other countries along these lines.

The Cuban municipalities are really derived from the Spanish, and their original organization was exactly the same as those of the famous municipalities of Castilla and Leon which, together with those of the north of Spain, were the admiration of the whole world by reason of their culture and wealth. This was the case until the sixteenth century, when the haughtiness of an Austrian dynasty destroyed the powerful Spanish nation, which was a great one while her Government was essentially Spanish and as long as the spirit of progress of her municipalities was allowed to have freedom of action. An eminent French writer—BECHARD—speaking of the municipalities of the middle ages, says that those of Spain were the most prosperous of Europe, and adds that "the freedom which was smothered in other nations by the feudal régime was safe in the lofty and generous souls of the Spaniards." And F. S. HOFFMAN, in his notable work, entitled "The Sphere of the State," says that "the first country which secured municipal liberty after the monarchs had established the rule of the sword all over Europe was Spain." Therefore, the Cubans have reason to be proud of the fact that their municipalities descended from those of Spain.

It is owing to this Spanish origin that we have a close and direct relationship with the Roman municipalities. The municipal system of Rome was established in all her colonies, and it should be borne in mind that Spain was the most romanized of the Roman colonies. At the time Cuba was discovered the Latin language was spoken in almost the whole southern part of Spain. The identification of Spain and Rome during nearly eight centuries of domination was such that the younger PLINY, in his famous letters, regarded the Spaniards as true Romans. Such Spaniards as TRAJAN, THEODOSIUS, ADRIAN, and MARCUS AURELIUS were Emperors of Rome. GIBBON, the English historian, says that of "the eighty golden years" during which mankind has been most happy, sixty elapsed while the Spaniards held the scepter of the world. No greater honor could possibly be paid to a conquered people. It was under the influence of this Roman spirit that the Spaniards of the sixteenth century created the Cuban municipalities; and hence F. W. BLACKMAR is right when he says that the first colonies of Spain in America were more Roman than Spanish. Wherefore, the Cuban municipalities have a brilliant and classic pedigree, as they descend in direct line from that Roman municipal régime, in accordance with which laws the whole world in those times was subject to one single center, but not by surprise or in a peremptory or accidental manner and without a solid foundation—as was done by the former great empires—but by reason of the splendid interlock that rendered possible the idea of the universal state which only Rome conceived.

During four centuries the Cuban municipalities acted on that Hispano-Roman impulse, until they recently became a Republic through the generous aid of this powerful and noble country. Then Cuba undertook the work of modernizing its local public life, since the laws should correspond to the social conditions, and these are changeable par excellence. We entered into a new state of things which required a new organic law of the municipalities. This law, promulgated on the 25th day of January, 1909, contains a full declaration of the judicial entity of the municipalities, and, as stated in article 114 of this law, the Cuban municipal government is vested with all the necessary powers to regulate, by means of its deliberations and decisions, the matters relating thereto. In this respect our law corresponds to article 64 of the French Municipal Code of 1884, which is considered by ALBERT SHAW—an eminent authority on municipal affairs—as one of the most advanced legal expressions of municipal autonomy.

As regards the capital of the nation, article 124 of our municipal law prescribes that its embellishment, hygiene, and general progress shall be in charge of the national treasury, and that the General Government shall carry out such public works as may be necessary, it being an exceptional system and somewhat similar to those of Washington and Paris.

With the only exception of the capital, the powers of the Cuban municipalities to act is not limited by the system of powers enumerated, which restricts to such a great extent the action of the English and Anglo-American municipalities. Besides, the mayor and aldermen are elected by direct vote and we have separated the local public powers—as is generally the case in this country—the city council having a local legislative chamber and its own chairman, and in a separate place the mayor acts as chief of the local executive power. So that, therefore, in Cuba the republican system of government does not exist only in the comparatively abstract field of the constitution of the state and national powers, but is also extended to the municipality which, according to SISMONDI, is the true country, the real country, that which we see and appreciate with all our senses. In Cuba each city and each village is a true local republic, with its own elective government and without any other ties of subordination to the central power—either in its organization or its functions—than those which are strictly required in order to maintain the political unity of the State. This is what the National Municipal League of the United States claims for you. If we add to this the fact that the autonomy of the Cuban municipalities does not emanate from laws—which are the changeable work of colegislative bodies—but from a still higher source, that is to say, from the constitution of the state itself, it will be seen that we are placed in a legal situation which is eminently progressive, constituting a solid guaranty of political liberty which it is almost useless to fully declare in the fundamental code if, afterwards—as is the case in many countries—such liberty is denied in practice because the municipalities remain subject to the executive central power or because sometimes they are "abject slaves of the legislature of the State," as graphically expressed by the eminent publicist, HORACE DEMING. Within such legal state constituted in Cuba we live there the full and sincere republican life, because, as the Hon. SETH LOW has said, "the success of democracy never is endangered through an excess of political liberty, inasmuch as the latter strengthens and stimulates it." For their legislative work the Cubans had the good sense to carefully avail themselves of the deep studies and investigations of the National Municipal League of the United States. And we also learned a good deal from the great Spanish statesmen who were acknowledged authorities on such matters.

It is evident, therefore, that the Cuban municipalities are legally empowered to carry out any necessary work for the embellishment of cities. The legislative aspect of the problem, in order to put the same into practice, having been solved, we are now commencing our independent life, because we know that in the history of nations one year represents only a day, and we are preparing the ground and seriously studying the manner of developing a greater Habana, worthy of its splended possibilities, in view of the fact that even now it is already a great city with more than 300,000 inhabitants, and so clean and enjoying such excellent sanitary conditions that, according to the latest vital statistics, our average mortality has been lower than that of any other great city of the world, which is indeed a great asset. Our efforts, in order to carry out a great plan to embellish our capital city, will now be greatly promoted by the valuable work of this convention; the same being true of other towns of our Republic.

The great American people, who are acknowledged masters in many things, and who especially know how to appreciate the practical aspect of life, have also been remarkably successful in their works relating to civic improvements, and to such a degree that they have actually awakened a sincere and enthusiastic interest in this matter. This is indeed one of the great characteristic features of this wonderful country, by which it has been able to merit not only the admiration but also the gratitude of all civilized nations. And hence the important work of this convention will undoubtedly exercise a powerful and universal influence.

# PROMINENT IN PAN AMERICAN AFFAIRS

THE BULLETIN takes pleasure in publishing in this issue the portraits and sketches of several men prominent in the development of commerce and friendship in Latin America. This list is an especially notable one, representing as it does both North and South America, and including the four great sections of Latin America, viz., Mexico, the island Republic of Cuba, Central, and South America. All in this group, moreover, have devoted their best energies for many years not only to promoting closer and better relationship between their respective countries and the United States, but have also been prominently identified with the upbuilding and progress of their particular districts.



SEÑOR DON RAMÓN RABASA,
Governor of the State of Chiapas, Mexico.

SEÑOR DON RAMÓN RABASA, GOVERNOR OF THE STATE OF CHIAPAS, MEXICO.

The name RABASA has for many years been intimately associated with the awakening and growth of the spirit of progress so characteristic of the State of Chiapas today. It was Don EMILIO, brother of the present governor, who, as governor in 1892, gave a stimulus to the agricultural development of that district which has since resulted in making Chiapas an important and rapidly growing State. The present governor, Señor Don RAMÓN RABASA, has consistently followed the program outlined by his brother, and through their combined efforts their native State has undergone a wondrous transformation compared with a quarter of a century ago.

Señor RABASA was born at San Cristobal Las Casas in June 1849. At the age of 12 years he was sent to Europe, spent four years of his boyhood at college in Barcelona, Spain, and two and a half years at the German college of Remscheid. He returned to Chiapas in 1867 and for several years managed a large rural estate belonging to the family. In 1879 he made an extended tour of the United States, Canada, Continental Europe, and Great Britain, returning to Mexico with that liberal education, culture, and breadth of intellect acquired only through travel in foreign lands. He then devoted himself to the interests of his State, both along educational as well as political lines.



COL. ORENCIO NODARSE, OF CUBA.

Among the numerous positions held by Señor RABASA were, professor of arithmetic and geometry, and history and geography, at the State Normal School; member for several terms and twice president of the Municipal Corporation of Tuxtla Gutierrez, the present capital of the State; member of the corporation of Tonala; jefe politico (chief of administration) of the Department of Tuxtla; inspector of public works; deputy to the Federal Congress for the State of Tamaulipas; state treasurer-general; manager of the Bank of Chiapas. From December 25, 1905, to June 20, 1906, he was provisional governor of Chiapas, constitutional governor from June, 1906, to November, 1909, and reelected to this position until the 30th of November, 1913.

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### COL. ORENCIO NODARSE Y BACALLAC, OF CUBA.

Col. ORENCIO NODARSE Y BACALLAC, former Director-General of Posts and Telegraph of the Republic of Cuba, for two terms, has just agreed to assume the directorship of the special rent bureau. The executive ability and integrity of Señor NODARSE won for him profound respect and admiration throughout the Republic.

Señor NODARSE was born in the Province of Pinar del Rio, but when a young man he took up his residence in the Province of Matanzas. Here he took an active part in the revolutionary movement,

and, later, during the war for independence, distinguished himself as a soldier on the battlefield. He was also a member of the constitutional assembly of the revolutionary forces.

At the conclusion of the war he was appointed chief accountant and supervisor of the municipality of Havana. On account of the rather unsettled condition of affairs at that time this position was regarded as delicate and responsible, but Colonel NODARSE rendered most valuable services here. His administrative ability soon brought him into the political arena of Havana, and he was elected mayor of the city. For personal reasons, however, he never assumed the office.



CAPT. BENJAMIN DYER MANTON,

Ex-United States Consul at Colonia, Uruguay, and "Father of the Telephone in the River Plate."

He was later appointed Director-General of Posts and Telegraph of the Republic, but resigned soon after and devoted his energies to the organization of the political forces at the capital. In 1909 General GOMEZ again tendered this position to him. He occupied this post up to the time of his appointment as Director of the Rent Bureau.

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CAPT. BENJAMIN DYER MANTON, "THE FATHER OF THE TELEPHONE IN THE RIVER PLATE."

Captain MANTON was born in Rhode Island in 1829, and educated in the public schools of the vicinity. When 17 years of age he made his first sea voyage, five years later sailing for California via Cape Horn. In 1852 he commanded the *Le Couq* in a voyage to Montevideo. As master of the *Messenger* several years later he carried 300 passengers from Liverpool to Melbourne, accomplishing the voyage in seventy-one days, a record passage. At the outbreak of the civil war he enlisted and was given command of the mortar-brig *Sea Foam*, and at a later date of the U. S. S. *Relief*, attached to Dupont's squadron. On his discharge from the navy he built two steamships which he placed in the South American trade.

In 1868 Captain MANTON was appointed American consul at Colonia, Uruguay, retaining the position until the office was abolished in 1907. While at this post he installed in Colonia the first dock for repairing vessels ever established on the River Plate and equipped it with American material and machinery. In 1880 he introduced the first American horsepower threshing machine to be shortly followed by the introduction of American reapers and harvesters.

But Captain MANTON'S fame rests particularly on his successful efforts to introduce the telephone, as a result of which he has become widely known as the "Father of the Telephone in the River Plate." Against great opposition he introduced the first telephone—the Gower Bell—ever installed in these countries. After completing the telephone work he installed an electric-light plant and a telephone system in the city of Colonia. For some time he strongly urged an air-line railway from Montevideo to Colonia, there to connect with a fast line of ferryboats, so as to carry passengers and mail to Buenos Aires in three or four hours, and it appears now that the Government of Uruguay is to grant such a concession to two syndicates.



FREDERICK C. COOK,
Prominent American business man in Argentina.

To Captain MANTON belongs largely the credit of developing Colonia as a popular summer resort for the Argentine capital only 26 miles away. A syndicate has recently purchased his beautiful estate Villa Real as the basis for this resort, and a large hotel and beautiful pleasure grounds are soon to be constructed.

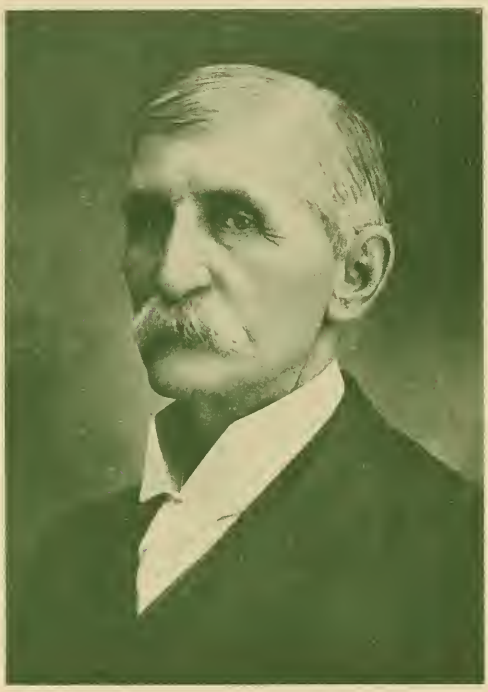
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## FREDERICK C. COOK, AN AMERICAN BUSINESS MAN IN ARGENTINA.

FREDERICK C. COOK, merchant and landed proprietor, was born in New York City September 17, 1853. While quite young he went to the Argentine Republic and served an apprenticeship in one of the

leading British firms until the year 1870. For two years he was employed by JOHN COGHLAN, the famous civil engineer and founder of the waterworks of the city of Buenos Aires.

In 1877 Mr. COOK established, with Mr. C. S. ROBERTS, the firm of C. S. ROBERTS & Co., which in a short time became the leading export and import firm doing business with the United States. After a quarter of a century of partnership Mr. ROBERTS retired from the firm, and Mr. COOK continued the business under his own name.



JOHN B. TERRES,
United States Consul at Port au Prince, Haiti.

Mr. COOK always took an active interest in the progress and development of Argentina. He was one of the principal founders and directors of the La Blanca Freezing Company, one of the first local directors of the Midland Railway, associated with the Chamber of Commerce and the British Hospital. He was also one of the original founders of the North American Society of the River Plata and was honored with the first presidency of this organization, which has been so prominent in promoting a closer commercial union between North America and the countries of the River Plata.

For the last thirty-five years Mr. COOK has taken a prominent part in nearly all the undertakings of a social and charitable character of the English-speaking community. Besides being a director of the recent International Agricultural Exhibition at Buenos Aires, he also represented the United States as a delegate.

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JOHN B. TERRES, UNITED STATES CONSUL AT PORT AU PRINCE, HAITI.

Few men in the consular service of Uncle Sam can claim the distinction of serving in one post for thirty years; yet such is the record held by JOHN B. TERRES, the present United States consul at Port au Prince, Haiti.

Mr. TERRES was born in Charlotte, North Carolina, September 25, 1847. He received his elementary education in a private school and entered the Richmond Medical College. In 1866 he graduated, receiving the degree of doctor of medicine. For fourteen years he conducted a general practice; but he left his medical work to accept an appointment as vice-consul general to Port au Prince in 1880. After five years of service he resigned this position, but later that same year was reappointed. On May 4, 1904, he was appointed consul to that port, which position he now holds.

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CHESTER DONALDSON, UNITED STATES CONSUL AT PORT LIMON, COSTA RICA.



CHESTER DONALDSON,
United States Consul at Port Limon, Costa Rica.

Mr. DONALDSON was born in Ovid, New York, March 28, 1862. He received his early education at the Gilbertsville Academy, of New York, and Hamilton College. For several years he was engaged as teacher at Riverview Academy, Poughkeepsie, New York, the Berkeley School, of New York City, and as principal of the West End School, New York. He then engaged in engineering work and was employed as a military engineer by the Nicaraguan Government. Mr. DONALDSON also served in the Twenty-second Regiment, New York State National Guard. After examination he was appointed, on January 14, 1898, consul at Managua, and transferred to his present post, Port Limon, November 25, 1905.

# THE FLAG AND COAT OF ARMS OF HAITI

THE colors under which TOUSSAINT LOUVERTURE had gallantly fought were those of the French tricolor. Not even when he became master of the whole country, and had adopted a constitution for his native land, on the 8th of July, 1801, was the flag of France discarded. It was not changed until 1803 after that upright patriot, "The First of the Blacks," became a victim of the duplicity of those who had been unable to vanquish him by fair means, and was cajoled into bondage and exiled to France to die of hunger and privation in the Castle of Joux. Then Gen. JEAN JACQUES DESSALINES, his erstwhile lieutenant, renewed the struggle for liberty with retaliations, similar in their severity to the cruel outrages which had been committed on his countrymen.

Gen. DESSALINES determined to throw off the allegiance of France. He was convinced of the falsity of NAPOLEON'S promises and to him these words of the consul's proclamation, announcing to the inhabitants of St. Domingue the expedition of Gen. LECLERC had been found wanting: "Should any one whisper in your ear: These forces are destined to deprive you of your liberty, answer: 'It is the Republic that has given us liberty; the Republic will never suffer it to be ravished from us.' " The promises had indeed been broken, for slavery, abolished in 1793, was reestablished May 20, 1802.

Bent on erecting a sovereign Government, Gen. DESSALINES suppressed the white of the French tricolor—the white representing good will and peace for France—and keeping the other colors, reversed them in the arrangement of the flag. These were the ones which saw the departure on the 30th of November, 1803, of the remnants of the once brilliant army of 25,000 men which had been sent in 1802 by NAPOLEON. About 8,000 troops at Cape Haitien, under ROCHAMBEAU, surrendered and went on board of the British squadron which was cooperating with Gen. DESSALINES.

Made governor for life in October of 1804, DESSALINES proclaimed himself Emperor and was confirmed by the constitution of 1805, which by article 20 determined the colors of Haiti to be black and red.

After Gen. DESSALINES was assassinated in 1806, the French part of the island was divided between CRISTOPHE in the north and Gen. PETION in the south. Gen. HENRY CRISTOPHE was made King under



HAITI.

ECKERT LITHO. CO., WASH., D.C.

the title of HENRI I, and in 1811 the coat of arms was: In a shield a phœnix rising from the ashes, a lion on each side of the shield, surmounted by a crown with the motto, "Dieu, Ma Cause et Mon Epée" (God, my cause and my sword). Adorning the shield, and around it, the collar of the order of chivalry of ST. HENRY and trophies. In the coat of arms of 1814 the shield is surrounded by a circular band in which are inscribed the words: "*Je renais de mes cendres*" (I rise again from my ashes). In 1825 England recognized the independence of Haiti, and France in 1838.

In 1843 Gen. JEAN PIERRE BOYER became the President of the whole island. He had first united in his hands all the French part, succeeding Gen. PETION in 1818 and CRISTOPHE, who had committed suicide, in 1820. The Eastern or Spanish part of the island, which kept the old name of Santo Domingo after the cession, but had again, by the Treaty of Paris in 1814, reverted to the Spanish dominion, had, on the 21st of December, 1821, declared its independence from the mother country. BOYER, taking advantage of dissensions there, invaded and conquered it, and in 1822 was the President of the new government, which was called the Republic of Haiti.

Article 192 of the republican constitution of 1843 provided that the colors of the flag should be blue and red, placed horizontally, the blue uppermost; and the arms of the Republic consisted of a palm surmounted by the cap of liberty and ornamented with a trophy of arms with the motto: "L'Union Fait la Force" (In Union there is strength).

The coat of arms was modified during the Empire of SOULOUQUE or FAUSTIN I, from 1849 to 1859, but when the Republic was reestablished in that year by Gen. FABRE GEFFARD, the arms of 1843 were again adopted and they have remained unchanged.



# THE NATIONAL HOLIDAYS OF HAITI

SINCE its emancipation, the Republic of Haiti has had, at various epochs, besides the 1st of January and the 1st of May, other national holidays to commemorate the birth of distinguished men and notable events in the internal history of the country. But since the 14th of June, 1867, by article 201 of the constitution, only the above-stated days are celebrated.

The 1st of January, 1804, was the culmination of the patriotic efforts of Hispaniola (little Spain, as COLUMBUS named the island when he discovered it on December 6, 1492) for its liberty. French and Spanish struggled for the supremacy of the island; but by the treaty of Ryswick in 1697 Spain had to give up part of it to France, which called it St. Domingue, and by the treaty of Basel of July 22, 1795, Spain relinquished the remaining portion.

More than a quarter of century before the citizens of France had battered down the old bulwarks of tyranny through the Bastille and before the movement for liberty, equality, and fraternity had entered on its conquering march, MAKANDALL, a Haitian, attempted to throw off the yoke of European domination and, on the 20th of January, 1758, failing in his plans, stoically suffered death at the stake, being burned alive at Cape Haitien in the midst of thousands who witnessed the inhuman sacrifice. Many liberty lovers of the island enlisted in the ranks of the American army and participated in the war of independence of the 13 colonies. They were at the siege of Savannah under Count D'ESTAING and General LINCOLN, and when they returned home they worked and asked for the same boons for which they had fought for others and for which their own metropolis had given aid to the Americans. Intent on keeping the monopoly of the honors and positions they had heretofore enjoyed, the whites opposed the demands of the blacks, but in France a Society of the Friends of the Blacks, among whom were such leaders as GREGOIRE, MIRABEAU, and LAFAYETTE, supported the aspirations of the negroes. The quadroon, OGÉ, a cultured and brave man, at the time in France, returned to Haiti and strove to rally the patriots into defiance of the home Government.

He was unsuccessful, and being captured was broken at the wheel at the age of 35, on the 23d of February, 1791, as was also his friend and companion, CHAVANNES. Their heads were placed on

poles in the public highways as examples to terrorize the populace. When the national convention of France, of 1791, gave the mulattoes all the rights of French citizens, the two classes clashed in Haiti, and when at the instigation of the whites the National Assembly of France, by decree of the 28th of March, 1792, sanctioned by the King on the 4th of April, repealed the measure, a destructive warfare between the whites and blacks resulted. The situation in the island was so anarchical that the commissioners from France tried to restore peace by doing justice to the negroes, and on the 20th of August, 1793, slavery was abolished. This did not suit the slaveholders, and in the same year they appealed to the English for aid against the freedmen. The British forces invaded the island and for four years the country was the scene of constant fighting and devastation. In 1797 the great man, TOUSSAINT LOUVERTURE, placed by WENDELL PHILLIPS among the greatest, commenced to write his most brilliant pages of Haitian History, not only by his military triumphs, driving the English in 1798 from the island and conquering the Spanish side in January, 1801, but also by his impartial and honest administration. He gave protection to the whites and, as prosperity returned to the island, he established his far-seeing law as to the cultivation of the soil, which he held was the basis of the future welfare of the country. He believed that the weapons of war should be turned, once that independence had been obtained, into agricultural implements, and that the best soldiers are those who become the best farmers. Thus originated the day of agriculture, May 1, when prizes are awarded to the best products of the farms, in competitions held at different places.

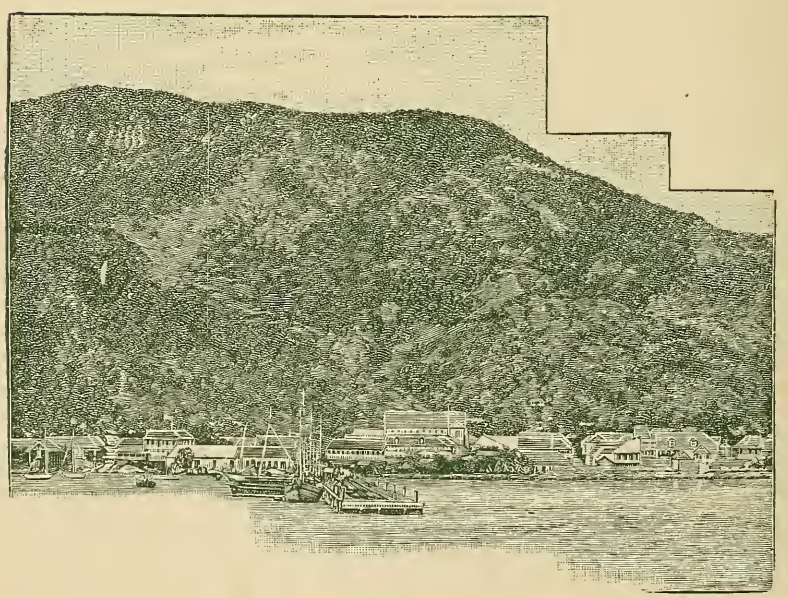
But TOUSSAINT'S brilliant career ended far from his native land; it was reserved to General DESSALINES to complete the task of making the island a new nation. It was he and Generals CRISTOPHE and CLERVAUX, twelve years after the struggle had commenced, in battles full of deeds of unquestionable valor and energy, such as Trois Pavillons, Ravine a Coulevre, and Crete-a-Pierrot, who at Port Dauphin, on November 29, 1803, declared thus their determination that St. Domingue should cease to be a colony:

> Restored thus to our primitive dignity we have asserted our rights; we swear never to yield them to any power on earth. The frightful veil of prejudice is torn to pieces; let it be so forever. War be to those who would dare to put together its bloody tatters. * * * Toward those men who would do us justice, we will act as brothers; let them rely forever in our esteem and friendship; let them return among us.

At the very city of Gonaives, whence TOUSSAINT LOUVERTURE had been taken away from his native hearth, a general assembly of the national representatives was called for the 1st of January, 1804. General DESSALINES, commander in chief of the native army, accompanied by his officers, was in the principal square at dawn; he made

an impassioned speech, had the Declaration of Independence read, and after having asked the advice of his subordinates, the country, thereafter to be called by its aboriginal name "Haiti"—meaning wooded and mountainous land—was proclaimed independent in the midst of artillery salutes and beatings of drums. The oath was then taken to renounce the domination of France, to die rather than to live under it, and to fight to the last and never again to submit to any foreign master.

This day and the one dedicated to agriculture were fixed by the constitution adopted in 1805 and have been kept since then. By article 21 of that constitution it was stated that agriculture being the first and the most noble and useful of all arts should be honored and protected. Haiti, the first colony of this continent, after the United States, to obtain its independence, thus consecrated in its holidays the great forces of national life, patriotism the 1st of January, and labor the 1st of May.



# BOOK NOTES

"**Commercial Geography.**" By EDWARD VAN DYKE ROBINSON. Chicago and New York. Rand, McNally & Co. (1910c.) Ix, 455, xiii—xlviii p. Maps. Illus. Size 5½ by 8 inches.

The author conceives commercial geography to be the study of the localization of industries and then proceeds to discuss the factors involved. While formerly included in Traders Geography, and supposed to comprise anything and everything useful for a merchant to know, the modern method tends toward investigation that goes beyond facts and looks to causes. The logic of this method is apparent, and Mr. ROBINSON proceeds with his work in a thorough manner.

Confining ourselves to a study of that part of commercial geography relating to Latin America, the author is severe in several of his statements of conditions there, and because of the fact that his figures are out of date, leaves the student under a wrong impression on some points.

As a whole the volume is excellent, being well illustrated, while the text is clear and easily understood.

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"**Notes sur la Medecine et al Botanique des Anciens Mexicains.**" Par. A. GERSTE, S. J. One volume of 191 pages. Second edition reviewed and corrected. Published by the Imprimerie Polyglotte of the Vatican. Rome. 1910.

The Columbus Memorial Library is indebted to the DUKE OF LOUBAT for this very interesting and valuable addition to its collection of Americana, which appears in book form for the first time, having previously been published in serial form in the "Revue des Questions scientifiques" in 1887 and 1888. These notes on medicine and botany of the ancient Mexicans have been revised by the author and owe their present publication to the generosity of the DUKE OF LOUBAT, whose name is closely associated with all study and research pertaining to Mexican archaeology and Americana.

In the domain of science nothing reveals the genius of these ancient people so much as the progress realized in astronomy, botany, and medicine, and the author furnishes curious details on their remarkable advancement in medicine and botany. As with all primitive races, magicians and charlatans acquainted with the rudiments of science took advantage of the ignorance of the multitude. Nevertheless these ancient Mexicans were acquainted with the medicinal properties of numberless native plants and their efficacious use in case of illness. Vapor and medicinal baths had been known from time immemorial, as well as massage. Surgical operations were performed, even trepanning. The narcotic and stupefying properties of certain plants, especially of the *mandragore*, were also known. In his "Tesoro de Medicinas," written in 1580, GREGORIO LOPEZ stated that the mandragore would cause the loss of consciousness for about three hours, and physicians administered it before cutting or cauterizing

The medical science of the Mexicans is intimately allied with the incomparable flora of their country and the ancient Mexicans had a passion for flowers, which were used in great profusion to decorate their temples, idols, and homes of their rulers. It is related that a certain lord of Tlachquiauhco, MALINAL by name, lost his crown as well as his life for having refused to sell a wonderful tree, the tlapalizquixochitl, bearing flowers of rare beauty and fragrance, that was coveted by MONTECUHCUMA, who had dispatched a special ambassador laden with presents and requesting him to name his own price. Upon his refusal MONTECUHCUMA declared war, which he carried

to a successful conclusion, thus obtaining possession of the beautiful tree and his rival's kingdom as well. Floral fêtes generally preceded human sacrifices, the victims being crowned with garlands of flowers. Certain flowers were reserved for royalty, others for the nobility.

The love of flowers explains the origin of so many magnificent parks which later were the admiration and wonder of the conquistadores.

Mr. GERSTE's book, which has been crowned by the French Institute and obtained the LOUBAT prize of 1910, is of especial interest to those who are interested in the study of the extinct civilizations of the New World.

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"**The Great States of South America. A Concise Account of Their Conditions and Resources With the Laws Relating to Government Concessions.**" By CHARLES W. DOMVILLE-FIFE. London, G. BELL & SONS, 1910. xv, 235 p. Plates. Fold. Maps. Size 5½ by 8½ inches. *Price 12 shillings, 6 pence.*

The author has collated a number of facts relative to the larger South American Republics, and in his description of the several States gives a concise review of the geographical and political conditions of each. The special value of the volume lies in the fact that it contains an epitomized account of the laws, regulations, and conditions relating to the granting of Government concessions in the different Republics. This class of information will be appreciated by all who contemplate investing in South America.

The book will be of especial use to busy men who want to get a bird's-eye view of conditions and opportunities in South America.

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"**Reports of the Princeton University Expeditions to Patagonia, 1896-1908 * * * Volume 7, Palaeontology, Part 1, Litopterna of the Santa Cruz Beds.**" By WILLIAM B. SCOTT. Princeton, New Jersey, The University, 1910. 156 p. 20 plates. Size 10 by 13 inches.

This study of the Santa Cruz fossils with their classification in families and species, the result of two Princeton University expeditions, is a most exhaustive technical investigation of the subject.

The specific group dealt with here—Litopterna—is unusually interesting, in view of the fundamental problems of descent raised and because a definite determination of systematic position and relationship will illuminate many obscure points of evolutionary philosophy. The restoration of the skeletons of these extinct mammals has been carried out with great care, as shown by the excellent plates at the back of the volume, and the conclusions deduced by a comparison of the bones would seem justified.

The whole work has evidently been undertaken with painstaking care and thoroughness, the result being a most valuable addition to this branch of science.

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"**The Master Telegraph Code.**" Published by the Business Code Company. New York. (1909c.) (2), 448 p. Size, 5½ by 8½ inches.

The value of a good telegraph code is self-evident and the saving effected in this way by large exporting and importing houses amounts to a considerable sum annually.

Unfortunately clearness is sometimes sacrificed to brevity and resultant errors may mean loss. This book, prepared by the Business Code Company, enables the sender to use exact words in code signs instead of the old set phrases, a distinct improvement.

The volume is attractively bound and printed.

"**Traveler Tales of the Pan American Countries.**" By HEZEKIAH BUTTERWORTH. Boston, DANA, ESTES & Co. (1902c.) 289 p. Illus. Size 6 by 8 inches. *Price $1.*

The purpose of this book is commendable, but the composition is unfortunate. While much good may come from turning the thoughts of the young toward South America through the medium of spirited stories, still it is even more necessary when endeavoring to impress the plastic mind of youth to adhere strictly to the truth.

Beginning with the cover-title "Central America," the work is crowded with inaccuracies. On page 164, line 13, occurs a phrase that certainly should not be put in the mouth of a child.

It is to be regretted that the author, who has written much about South America, did not give more care to the revision of his work.

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**Boletim do Museu Goeldi.** Pará, Brasil. C. WIEGANDT, 1910.

The library has received the Bulletin of the Goeldi Museum or Museum of Natural History of Para corresponding to the year 1909, which contains the reports of the operations of the museum for the years 1907 and 1908. The report states that valuable additions have been made to the zoological and botanical sections of the museum and that the work of catalogueing the ornithological collection of the museum has been completed and will soon be published. The staff of the museum has been increased and a number of scientific expeditions to the interior of Brazil were undertaken during the years under review. The most important of the works published under the direction of the museum is the "Album de Aves Amazonicas" (Album of the Birds of the Amazon Region), prepared by Doctor GOELDI, the former director of the museum.

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"**Il Caffè: Suo Paese e la Sua Importancia**" (The Land of Coffee). By B. BELLI. Published by ULRICO HOEPLI, Milan, 1910.

This is a small treatise on coffee cultivation and the coffee trade in Brazil. It gives a description of the plant, of its origin, and methods of cultivation and preparation in Sao Paulo. It contains 48 illustrations, 7 diagrams, and a map showing the coffee-producing zone in Brazil.

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**Os Serviços de Saude Publica no Brasil de 1808 a 1907.** Imprensa Nacional, Rio de Janeiro, 1909.

This very comprehensive work comprises two large volumes and gives the history of the establishment and growth of the public health and sanitary service in Brazil from the time of the arrival of KING JOHN VI in Brazil up to the year 1907. The first volume reviews the history of the health department, while the second contains the texts of all the laws and regulations issued to date governing the service. The work is profusely illustrated and contains several maps, diagrams, etc.

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"**Panama and the Canal To-day.**" An historical account of the canal project from the earliest times, with special reference to the enterprises of the French Company and the United States, with a detailed description of the waterway as it will be ultimately constructed, together with a brief history of the country and the first comprehensive account of its physical features and natural resources. By FORBES LINDSAY * * * Boston, L. C. PAGE & CO. 1910. xiii, 427 p. Illus. Maps. Size 5½ by 8 inches. *Price $3.*

The author has earned first right to the title of "historian of the canal," by virtue of all he has written on this, the most stupendous work of the twentieth century.

But he has not confined himself to the Zone alone in his study of canal conditions. His investigations have led Mr. LINDSAY far afield in the shadow land of history, and the result is an excellent straight story of the Panama Canal from the time when it existed only in the imagination of considerate Indians who wished to please their Spanish questioners with the confirmatory answers down to our days when man with infinite labor and patience is bending nature to his will.

The author, besides giving us all the important details of the canal construction, describes the country of Panama in most enthusiastic terms.

That this country would prove ideal for the homeseeking farmer is guaranteed by the following:

"There is nowhere in the world richer land than that of the Republic of Panama, and the Pacific section of the Province of Chiriqui surpasses all other parts in fertility of soil, salubrity of climate, scenic beauty, and conditions adapted to agricultural pursuits. The District of David is an ideal farming country. From the coast the land gradually rises to the mountains, about 40 miles inland. Stretches of monte alternate with large tracts of gently rolling llano, reminding one of the famous 'blue grass' country in the neighborhood of Lexington, Kentucky, and covered with a thick mat of similar grass. Frequent streams and clumps of forest lend diversity to the landscape, which has an everpresent background of mountain peaks whose heads penetrate the clouds. Finer land for cattle raising it would be impossible to imagine. The llanos furnish ample range of the best kind and rich portreros, filled with heavier growth, are fenced in upon the bottom lands."

Mr. LINDSAY has given us a book that should be memorized by the people of the United States, being the record of one of the greatest achievements of this nation.

In the review of "**Sugar: A Handbook for Planters and Refiners,**" by the late JOHN A. R. NEWLANDS and BENJAMIN E. R. NEWLANDS, which appeared in the September number of the monthly "Bulletin," the English price was given. As this book is imported and sold in the United States, we give here the American price, which is $10. Copies can be secured from SPON & CHAMBERLAIN, 123–125 Liberty street, New York.

# LATIN AMERICA IN THE MAGAZINES

"**Mexicans and Americans,**" an article appearing in "*The Outlook*" for December 3, by WALLACE GILLPATRICK, is timely, and although the character of the BULLETIN forbids the discussion of political matters within its pages, the reason for this policy being apparent, there is so much of real worth in this paper which might be strictly construed as being of a slight political nature, that we quote certain paragraphs as being worthy of repetition. Referring to the general situation, Mr. GILLPATRICK says:

With the increasing prominence of Mexico as regards her great natural wealth and industrial progress, and with the wide attention attracted by her recent celebration of the centenary of her national independence, the matter of the existing and future relations of the United States to Mexico—of Americans to Mexicans—assumes renewed interest. And while it is true that for the fiscal year 1909-10 the United States ranks first in trade with Mexico, it is also true that we enjoy the advantage of being her next-door neighbor, and that as such it behooves us constantly to cultivate with her neighborly relations of both a commercial and a social nature. The relative order of other countries as regards the volume of their trade with Mexico is as follows: Great Britain, Germany, France, Spain. Mexico's commerce with Central and South America is negligible, representing less than 1 per cent of her exports and imports. Notwithstanding our commercial supremacy, if we consider the purely social or human relations which are inseparable from trade, we find that each of the countries previously named outranks our own.

Passing in review briefly the reasons for a misrepresentation of motive, the author continues with a general statement, referring to the Mexican character, as follows:

Assuming, as we have every reason to do, that the two Governments have a satisfactory understanding founded on a sound and enduring basis, it remains for the American and Mexican people, who are destined to meet and mingle more and more, to strive earnestly and patiently for a similar understanding. That the Mexicans are doing their part is evident. They send their young men to American universities, and many of them remain for several years' business or professional experience in our country before returning home to put it in practice. English is taught in the public schools of Mexico, and its use is constantly growing there, especially with the younger generation.

The National University of Mexico, a recent foundation which actually represents the assembling of the various national colleges under a general directorate, has several Americans in its faculty.

Mexico's supreme contributions to international amity are her spontaneous and unfailingly kind reception of Americans and her generous hospitality, which, despite much misunderstanding and some abuse, is still abundantly given, being an integral factor in the national life. A careful study of Mexican character and customs made by the writer during a prolonged residence in the country will perhaps contribute somewhat to the American side of this much-to-be-desired understanding between neighboring peoples. Such a study will be clarified if we remember that since the conquest, or for nearly four centuries, the dominant influence in the social and intellectual life of Mexico has been Spanish; hence it is possible, notwithstanding the clearly defined class lines, to characterize certain traits and customs as national—much more possible, in fact, than in our own country, where vast distances and varied ancestry are responsible for marked contrasts both in character and customs.

A general attribute of the Mexican character is pride. Its most remarkable, and at the same time least understood, manifestation is considerateness toward all the world. It seems an embodiment of the old Spanish maxim: "In honoring others we amply honor ourselves." This attitude is apparent in all the relations of life, between people of the small class, high or low, and between people of different classes. The customs that have origin in it are legion. In Mexico a courteous manner is universal between friends, where mutual respect seems always present; between employer and employee, where unfailing politeness is observed, and between mistress and maid and master and man. While Mexican servants are usually submissive and faithful, the classes they serve are almost unfailingly considerate of them. A direct order, as such, to a servant is unusual, it nearly always taking the form of a request prefaced with "Do me the favor." There is magic in those four words and once an American appreciates it he will never go to Mexico without them.

Under this same subject he has this to say further:

This fine sort of pride in the Mexican character, of which the chief manifestation is considerateness, is informed by another quality which is also a national characteristic—extreme sensitiveness. With all their

scrupulous regard for the feelings of others, the Mexicans expect and demand the like in return. There is nothing unreasonable in this, it being really the logical working out of the Golden Rule according to modern ethics. Yet, it is right here, underneath this pleasant sea of Mexican kindness and urbanity, that lies concealed the rock on which many a ship freighted with the good intentions of Mexicans and Americans alike has been wrecked, and while this rock is nothing more or less than unfamiliarity with each other's customs, the fault seems plainly to rest with the Americans, who have sought the country of the Mexicans, and are therefore bound to learn their customs.

Regarding the bad manners of tourists, the author states facts that are difficult to believe, but are undoubtedly true:

A most unfortunate mistake is that of wearing articles of *peon* attire, no matter how picturesque, as the huge straw sombrero or the gaudy sash, which the *peon* employs to keep his truousers in place. This practice, which is general with American tourists, is as incomprehensible to Mexicans as would be to us the spectacle of a party of foreigners, apparently ladies and gentlemen, displaying over their own apparel the blue blouse of a mechanic and strolling along Fifth Avenue. This we must freely admit is not done even in this land of liberty and equality. It seems unpardonable for Americans, while touring Mexico, to walk unbidden into the homes of the people, even the poorest, and notwithstanding their possible interest in sociological research. It surely is more unpardonable to invade the churches during the celebration of religious services. And, while this is done constantly, I am convinced that it is done thoughtlessly, and that, if you should ask these same Americans how they would feel if strangers swarmed through their own churches suddenly, like locusts, and as suddenly swarmed out again, they would stare aghast at the mere suggestion. It must be confessed that this offense is sometimes due to a greedy and irreverent *cicerone*, intent only on his fee, but are enlightened Americans, pray, to be led into deeds of violence by an unscrupulous guide? The natural impulse, seeing a congregation of people on their knees, would seem either to join them or quietly to withdraw.

In view of the fact that serious misunderstandings often have the most trivial causes, we do not hesitate to recommend the article to the earnest consideration of all Americans either actually engaged in or contemplating doing business in Mexico.

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"**The Truth About South America,**" an article in the December number of "*American Exporter*," by FRANKLIN JOHNSON, being a brief review of American trade conditions in South America, and is to be distinguished from the numerous articles recently published along similar lines, in that it takes a distinctly cheerful view of the outlook. While it is well known that the United States has heretofore been rather backward in this field of commerce, such a change has come about in conditions generally during the last two years that we hold to the same conclusions as Mr. JOHNSON:

Latin-American trade—more particularly South American trade—is a favorite subject for loose thinking, loose talking, misconceptions, and glittering generalities.

Those who discuss the question may be divided into three classes: First, the imaginative enthusiasts, who paint a picture of a land flowing with milk and honey, of illimitable wealth, resources, opportunities, etc., *ad infinitum, ad nauseam*. Second, the pessimistic calamity howlers, who tell of the well-nigh criminal neglect of that continent by American manufacturers, capitalists, etc., and tell us how England and Germany are gobbling up all the trade and all the resources, and who clamor for American banks and American ships, and so on. Third, a very much smaller class, men who recognize the plain facts that American manufacturers are doing very nicely down there, thank you; that the prospects for the future are exceedingly bright, yet do not fall into the error of considering Latin-American trade and export trade synonymous terms.

The author has traveled extensively through South America as a business man, and his statements are the result of careful investigation of all points on Latin-American development that would interest the business man. Although the merchants of the United States are particularly favored by reciprocal tariff agreements with Brazil, still American commerce has been making more advancement in other Latin-American countries where the same favorable agreements are not in effect. For instance:

The accompanying table, being an abstract of the most recent Argentine Government statistics, tells tersely and emphatically the story of the export trade of the United States with the Argentine Republic.

ARGENTINA'S IMPORTS, 1909.[a]

[Expressed in Argentine gold dollars, equivalent to 96 cents American gold.]

| Country. | Amount. | Percentage of entire imports. | Percentage of increase over 1908. |
|---|---|---|---|
| Great Britain | $99,198,269 | 32.8 | 6.2 |
| Germany | 44,555,770 | 14.7 | 17.7 |
| United States | 43,068,829 | 14.2 | 20.9 |

[a] Total imports, $302,756,095, the share of the three great exporting countries representing 61.7 per cent of the total imports.

There can scarcely be anything radically wrong with our American status as an exporting country when we can sell Argentina $40,000,000 worth of goods a year, 14.2 per cent of her total imports, as against Germany's 14.7 per cent and Great Britain's 32.8 per cent. The most significant fact shown in the table, however, is that American trade here is growing at the rate of over 20 per cent a year to Great Britain's mere 6 per cent and Germany's 17 per cent.

The records of this office show a tremendous increase in interest in all Latin-American countries by the United States during the last two years, and we are convinced that as soon as the merchants of this country are a little more familiar with the *modus operandi* of the business houses of South America the United States will come to her own in the southern Republic markets.

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"**Mining in Nicaragua,**" by T. LANE CARTER, of Chicago, Illinois, a paper appearing in the "*Transactions of the American Institute of Mining Engineers,*" is one of the best articles on this subject that has come to this desk.

Mr. CARTER is evidently a miner of considerable technical education and practical experience. He covers every point of his subject, from the history down to instructions for the care of the health in the mining region he is exploiting.

In reference to the early discoveries of gold the author says:

About 1888 the first discoveries of gold were made in eastern Nicaragua and on the Atlantic coast. The placers did not last long and were soon abandoned for vein mining. No attempt on a working scale has been made at dredging, the indications not being favorable. A promising field for investigation is furnished by the black sands on the coast, especially from Walpasixa along Cape Gracias. But the future of gold mining in Nicaragua depends on the development of the veins.

The mining on the Atlantic coast has been done by men with little experience or capital. A man, probably "grub staked" by some merchant in Bluefields, would go out into the wilderness with inadequate equipment. Too often the merchant has looked upon mining as a method for making a market for his wares. If the small mining company which he formed bought a sufficient quantity of his goods, and was able to pay his bills, he was satisfied. In one instance known to me a promising mine was almost ruined because several mercantile firms were interested in it, and each had the right to supply goods for four months in the year. During these periods the firms would unload the maximum amount of supplies on the mine, each firm, in spite of the manager's protests, sending him in four months provisions enough to last him a year. The consequence was a criminal waste. It was not uncommon to see barrels of flour, costing $25 each, strewn along the wayside. Under such conditions it is no wonder that the mine did not pay dividends.

Mr. CARTER speaks of the difficulties of developing paying properties under previous administrations in Nicaragua, but he states that the foreigner receives as fair treatment as can be expected.

There has been a feeling in the outside world that mining property is unsafe in Nicaragua; that, even if a company or an individual owns a mine, there is constant danger of spoliation or confiscation. My experience has proved that this fear is unfounded. If a foreigner takes pains to see that he has complied with every law—and of this he must be quite sure—and obtains a clear title to his property, has it registered according to law both at Nicaragua and in his native country, he is as safe in his possession as if the mine were in England or the United States instead of the wilds of Nicaragua. The trouble in the past has been that the foreigners have not been sufficiently careful in complying with all the laws. As long as a company or an individual has a clear case and can appeal to his Government, he will always get justice, especially if he be an Englishman.



NEW PALACE OF FINE ARTS, SANTIAGO DE CHILE.

The author gives some useful points from the mining law of Nicaragua:

The mining law of Nicaragua is one of the most liberal in the world, especially from the poor man's point of view. The taxes required by the Government on mining claims (*pertenensias*) are only $5 in Nicaraguan money, about $2 in United States currency, per hectare per year. A hectare is 14,184 square yards.

The mining law is liberal in its granting of sites for plants (*planteles*) for the treatment of ores and also for water power. The Government allows a maximum of 100 hectares for a mill site (*plantel*), charging only 80 cents, United States currency, per hectare per annum.

The law requires prompt payment of these taxes before the 1st of February in each year. Otherwise the property is put up at auction. The mining claims only lapse by failure to pay the license within the specified time. No assessment work of any kind is required, and by the payment of the small tax the owner can hold his claims indefinitely. Few countries in the world offer such easy conditions.

He then goes on to describe transportation facilities, health conditions, difficulties of prospecting, geology and vein phenomena, and working costs, all in great detail. He goes into the question of labor very thoroughly, giving classes and cost of keeping the same.

In fact, this paper contains just the sort of information relative to the mines of Nicaragua that a practical prospector would wish.

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"**Certain Characteristics of the South Americans of To-day,**" by Prof. HIRAM BINGHAM, in the December issue of "*The Popular Science Monthly.*" The author takes up a consideration of that very delicate subject, a comparison of the personal characteristics of the peoples of North and South America. His evident sympathy with Latin Americans lays him open to the charge of being unfair to the people of his own country. His quotations from DICKENS can hardly be considered as accurate descriptions of universal social conditions in the United States at the time of that distinguished author's visit. Thoughtful travelers do not judge a nation by the manners of the underbred.

Relative to political conditions, Professor BINGHAM says:

It is particularly important that we should realize that the political conditions of the larger Republics are very much more stable than our newspaper and novel reading public are aware of. Lynchings are unheard of. Serious riots, such as some of our largest American cities have seen within the past generation, are no more common with them than with us. It is true that the Latin temperament finds it much more difficult to bow to the majesty of the law and to yield gracefully to governmental decrees than the more phlegmatic Teuton or Anglo-Saxon. But the revolutions and riots that Paris has witnessed during the past century have not kept us from a serious effort to increase our business with France. The occasional political riot that takes place, of no more significance than the riots caused by strikers with which we are all too familiar at home, is no reason why we should be afraid to endeavor to capture the South American market.

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"**Causes of The Lack of Political Cohesion in Spanish America,**" in the November number of "*The American Political Science Review,*" by the same author, is a paper that North Americans can read with profit.

The conditions under which the colonists of the United States achieved their early development, in contradistinction to the political inheritance that was the lot of the peoples of South America, should teach the inhabitants of the United States to temper their hasty criticisms when they read of political disturbances in Latin-American countries.

It is not for us to criticise the South Americans for having failed to unite and form a great nation. Our ancestors were favored by nature with a region that is comparatively accessible in all parts. It is not any more creditable to the English colonists that they united than it is discreditable to the Latin Americans that they did not. In both cases, racial characteristics, aided by diverse policies of colonial administration made a foundation for growth, which, by an extraordinary coincidence, was in every possible way favored by local geographical conditions. The English colonists, on securing their independence, had been acquainted with one another for generations; had fought side by side in the French and Indian wars; had intermarried; built up social and business friendships; united in sending agents to the mother country

and in sending representatives to Congresses where the leading men of each colony came to know one another's desires and aspirations. Placed by fate on a narrow strip of coast less in length than the seaboard of Chile alone, enabled by nature to communicate both by sea and land, separated from one another by neither deserts nor lofty mountains, what more likely than that they should have followed their natural traditions and formed a single nation. The difficulties in the way of the South American colonists following such an example were stupendous. Scattered over an enormous area, separated by the greatest natural boundaries that nature has produced, it was scarcely to be expected that they, too, should not follow the traditions of their race and build up local governments instead of forming a federation.

The historical and geographical reasons that prevented the formation of confederations have also mitigated against the building up of strong national Governments. The citizen is still inclined to favor the affairs of his city rather than the good of his country. He finds it easier to be loyal to the local chieftain than to the central Government. The cure for this, however, is already in sight. The energy and enterprise of English, French, and German capitalists are overcoming the obstacles that nature has placed in the way of intercommunication.

Of course it is impossible for the BULLETIN to in any way touch upon the politics of the different nations that support the Pan-American Union, but this is a question that is so entirely misunderstood by Anglo-Saxons generally, that we feel justified in discussing this interesting article of Professor BINGHAM'S.

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"**The Havana Post**," tourist edition, is a number that shows its editors to be alive to the attractions of the city.

Havana, in the riot of soft colors that make its setting, is shown in different tinted illustrations, while the text unfolds for us much of the history of the more interesting edifices.

The principal industries are then described and in fact the whole makes a distinctly readable guidebook that we recommend to all about to visit the beautiful island.

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"**Public Career of the Secretary of Finance of Cuba**," an appreciation of the qualities of Señor FRANCISCO DE P. MACHAVO, appears in "*The Bankers Magazine*" for November.

In the December number of the same magazine, an article entitled "**From the Rio Grande to Panama**," by FULLERTON L. WALDO, is reprinted from the BULLETIN.

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"**The Future of South America**," the leading article in the South American supplement of the "*London Times*" for October 25, treats the subject of coming South American greatness from the point of view of the almost inexhaustible resources of this region, being in the manner of a storehouse for the other nations of the world.

Of the wonderful growth of the Latin-American Republics, the author says:

The many and various processes of evolution in these 20 States, their constitutions, laws, and economic systems, present to the student of human affairs a field of inquiry unique in its variety and absorbing in its interest; in all of them the feature of strenuous vitality is particularly impressive. We have been wont to marvel at the bean-stalk growth of North American cities; yet now we learn that Buenos Aires and Valparaiso have for some time past been increasing more rapidly than any of these, with the exception of New York and Chicago. Twenty-five years ago travelers landed in small rowboats at Buenos Aires, a town of 40,000 inhabitants; today the city numbers some 1,200,000 souls and has 9 miles of docks. There is much food for reflection in the fact that during the last decade the great powers have been concentrating their efforts to acquire and retain a permanent footing in the trade of China, with no small stir of diplomacy and movement of armies. During this period, almost unnoticed, the foreign trade of the Argentine alone has grown to exceed that of the whole Chinese Empire; at the present moment it averages about £20 per annum per head of the population, as against about 6s. per head in China. Despite the fact that the vivifying tide of capital and immigration has hitherto flowed little farther than the borders of the Argentine, Chile, and Brazil, the collective foreign trade of 20 Latin-American Republics averages £6 per annum for a population estimated at 70,000,000. These figures are sufficiently remarkable, but less significant to the financier and economist than the rapid increase of trade balances in favor of the South American exporting countries.

Naturally, in an article of this character, the political situation must be touched upon, and this the correspondent discusses from its different aspects.

Other special atricles in this edition are: "**Uruguay,**" "**The Budget,**" "**American Railway Enterprise,**" "**The Early History of South America,**" "**Customs and Language of the Chaco Indians,**" "**A Voyage on the Amazon,**" "**The Brazilnut Industry,**" "**The Discovery of Raleigh's El Dorado,**" "**A Spanish-American Defensive Alliance,**" "**Rice-growing in British Guiana,**" "**Ancient Treasures of Mexico and Peru,**" "**Railway Development in Bolivia,**" "**Argentine River Ports,**" "**A São Paulo Fazenda,**" and "**Emigration to Brazil.**"

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"**The Monroe Doctrine,**" is the leading article in the South American supplement of this same paper for November 29.

Special articles are "**Naval Strategy and the Panama Canal,**" by Admiral Sir Cyprian Bridge, G. C. B.; "**The United States and Latin America,**" by the Hon. James Brown Scott; "**Panama Canal Dues,**" "**The Worship of Jurupari,**" "**The Public Works Policy of Argentina,**" "**Historical Sketches: The Conquest of South America,**" "**A Traverse of the Brazilian Forest,**" "**Life and Culture in Early Peru,**" and "**The Chilean Centenary Dinner.**"

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"**Real Presidential Politics in Brazil,**" by David Lambuth, a review of the last presidential campaign in Brazil which resulted in the election of His Excellency Marshal Hermes da Fonseca, appears in "*The American Review of Reviews*" for December.

"**The Railways of Brazil,**" by Lionel Wiener, is continued in the December number of "*Cassier's Magazine,*" in which the Paulista Railway and Navigation System is discussed.

"**Cría y Engorde de Cerdos en Uruguay,**" by Venancio Flores, in "*La Hacienda*" for December is a continuation of the discussion as to the best means of raising hogs in Uruguay.

"**The Guatemala of To-day,**" appearing in "*Brickbats and Bouquets,*" deals with the possibilities of this Central American Republic and reviews the measures which their President has inaugurated for the advancement of its industries.

"**Articulos Americanos,**" the official organ of the Latin American Export Company, is a most attractive medium of advertising. The illustrations and the text are just such as would appeal strongly to Latin American tastes. We congratulate the editors on producing a pamphlet that will do much in making known American products to our brothers of the other Republics, in the most attractive form.

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"**Mexico: A Nation with a Unique Problem,**" by Chester T. Crowell, in "*The Independent*" for November 24, is a discussion of present political conditions in our sister Republic.

"**Alluvial Gold Deposits and Mining in Colombia,**" by P. A. Alig, in "*The Engineering and Mining Journal*" for December 3, gives a general idea of the gold-bearing soils of this Republic. Short paragraphs take up "**Operating Facilities,**" "**Climatic and Labor Conditions,**" etc.

Another article in the same magazine is "**Minas Pedrazzini Operations near Arizpe, Sonora,**" by Edward L. Dufourcq.

"**The Territory of Magellan,**" by MARRION WILCOX, in the "*Bulletin of the American Geographical Society,*" for November, being a review in English of the "Censo Jeneral de Poblacion i Edification, Industria, Canaderia, i Mineria del Territorio de Magallanes, Republica de Chile, Pevantado por Acuerdo de la Comision de Alcaldes el dia 8 de Setiembre de 1906." Pasado i Presente del Territorio de MAGALLANES. Por LAUTARO NAVARRO AVARIA, Medico de Ciudad, Director de la Oficina del Censo. Punta Arenas. First volume, 4to, lxvi and 382 pp., 1907; second volume, 4to, 563 pp., 1908. A map and many illustrations add to the value of the work and give us information relative to this little-known territory.

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"**The Fourth International Conference of the American Republics,**" ky PAUL S. REINSCH, in the current number of the "*American Journal of International Law,*" is a discussion of the different resolutions that were adopted by this international meeting. A copy of the proceedings has already appeared in the November number of the MONTHLY BULLETIN.

"**Mexico's Centennial Illumination,**" by W. D. HORNADAY, is an illustrated description of the electric lighting effects achieved during the recent festivities in Mexico City, appearing in the "*Electrical Review and Western Electrician,*" for November 12.

"**The Life History of Parthenium (Guayule),**" by J. E. KIRKWOOD, and "**Rubber and Coffee in the Orient and Mexico,**" by PEHR OLSSON-SEFFER, Ph. D., are the two leading articles in "*The American Review of Tropical Agriculture* for July, 1910.

"**Climate and Man in Peru,**" by Dr. LUCY L. W. WILSON, in "*The Bulletin of the Geographical Society of Philadelphia*" for October, is continued from the July number.

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"**On Horseback from Cuzco to Ollantaitambo and Pisac,**" by ALBERT A. GIESECKE, President of the Cuzco University, in "*The Inca Chronicle*" for November, is an account of a trip made in this country, full of archæological interest.

"**Latin-American Trade Building,**" by PAUL T. CHERINGTON, in "*Advertising and Selling,*" for December, contains a statement of the essentials that should be a part of the preparation of all business men who hope to or expect to enter this coming field.

"**Passagem Mine and Works, Minas Geraes, Brazil,**" by ARTHUR J. BENSUSAN, and "**South of the Rio Grande River, Mexico,**" by WALTER M. BRODIE, are two technical articles appearing in "*The Mining World*" for December 10.

"**The Antigua Mines of Real de Sivirijoa, Sinaloa,**" by E. A. H. TAYS, is contained in "*The Engineering and Mining Journal*" for December 10.

"**Retort Coke Ovens in Mexico,**" by E. B. WILSON, and "**Cost of Sinking a Mexican Mine Shaft,**" appear in "*Mines and Minerals*" for December.

"**Deep Channel for Buenos Ayres,**" in the December 3d issue of "*Shipping Illustrated,*" tells of the proposed improvements in the River Plate, and gives the plan of the Minister of Public Works for the betterment of this harbor.

"**Registering Trade-Marks in Foreign Countries**" appears in the December number of "*American Industries.*"

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"**The Cost of Copper Production in Chile,**" appearing in "*The Mining Journal*" for November 26, contains the following paragraph:

In 1909 the total production of copper ores in Chile amounted to 500,532 tons, containing 9.217 per cent metal, or 46,134,927 kilograms of fine copper. This amount was produced from 775 mining establishments,

giving an average of 645.08 tons for each mine or works. As 100 of the principal mines produced 375,500 tons of ore, or an average of 3,758 per mine per annum, 124,732 tons represents the output of the remaining 675 mines, or an average of 184.78 tons each per annum.

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"**Combination of Para Rubber Receivers,**" an editorial taken from the Para Journal, "**O Commercio Norte-Brazileiro,**" appears in "*The India Rubber World*" for December 1. This discusses the rubber situation in Brazil.

"**The Panama Exposition for San Francisco,**" by BENJAMIN IDE WHEELER, LL. D., in "*The Independent*" for December 15, is an explanation why San Francisco should be considered as the most appropriate place for this international exhibition.

"**Sanitary Progress in Peru,**" by RICHARD T. HIRD, in the November issue of "*Peru To-day*," is the record of an important water supply and sewerage disposal scheme for the Port of Callao.

"**A Banana Plantation in the Spanish Main,**" by FREDERIC ARTHUR STANLEY, in "*Travel and Exploration*" for December, details the work of the pioneer banana planter on the western coast of Colombia.

"**Mexico y Cuba,**" a weekly scientific and literary review comes to us from Havana. It is printed in Spanish and English, and does great credit to its young editor, Mr. JORGE GODOY.

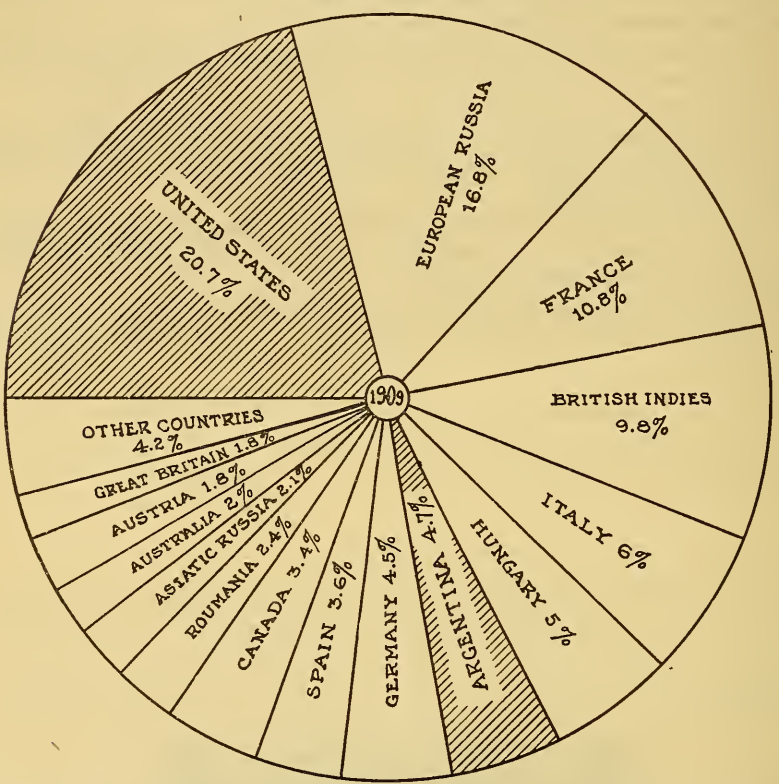
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# LATIN-AMERICAN NOTES

WORLD'S WHEAT PRODUCTION.

The International Agricultural Institute of Rome has just published a general statistical report on the wheat production in 1909.

*World's wheat production, 1909.*




The figures accompanying the name of each country indicate the percentage of the average annual production of that country as compared with the world's total average yearly production.

The following table shows the countries whose production exceeds 10,000,000 quintals:

| Country. | Area, in hectares. | Production, in quintals. | Country. | Area, in hectares. | Production in quintals. |
|---|---|---|---|---|---|
| Germany | 1,831,383 | 37,557,470 | Russia | 23,081,211 | 193,863,203 |
| Austria | 1,190,651 | 10,912,276 | Canada | 3,136,587 | 45,251,704 |
| Spain | 3,782,695 | 39,218,885 | United States | 18,908,798 | 200,630,041 |
| France | 6,596,240 | 97,752,200 | Argentine Republic | 5,895,373 | 42,500,860 |
| Great Britain | 775,614 | 17,485,982 | British Indies | 10,513,378 | 77,118,043 |
| Hungary | 3,560,972 | 34,023,562 | Asiatic Russia | 3,402,570 | 19,561,986 |
| Italy | 4,709,000 | 51,699,000 | Australia | 2,129,723 | 17,034,515 |
| Roumania | 1,689,044 | 16,022,536 | | | |

It will be noted from the diagram that United States and Russia rank first among the producing countries, followed by France. The crops of these three countries constitute about one-half of the world's entire production.

In respect to the yield per hectare, the order of importance is completely changed. Great Britain occupies first place with an average of 21 quintals to the hectare; Germany follows with 19.8 quintals; France, 13.8 quintals; Austria, 13.2 quintals; Canada, 12.4 quintals; Hungary, 12 quintals; Roumania, 11 quintals; Italy, 10.3 quintals; United States, 9.2 quintals; Spain, 8.1 quintals; Argentina and Asiatic Russia, 7.7 quintals; British Indies, 7.5 quintals; Australia, 6.7 quintals; European Russia, 6.2 quintals.

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### FAMOUS MAPPO MUNDI TO BE BROUGHT HERE.

There is a movement under way to bring to this country, for exhibition, the famous "mappo mundi," designed by MARTIN WALDSEEMUELLER (LLACOMYLUS) in the year 1507, over four hundred years ago. This map was made in the city of St. Die, in the Vosges, France, and was discovered a few years ago at Castle Wolfegg, in the Kingdom of Würtemberg, Germany.

On this magnificent world map, 8 feet by 4 feet in dimension, there appears for the first time the name "America." The map has been named, therefore, by the discovering scientists "Der Taufschein Amerikas."

As an original document of early Americana it stands without equal. To Americans its sentimental and patriotic value should be above estimation. Its scientific and artistic value is recognized by scholars all over the world. Cartographically, it is placed in the same category with the La Cosa Map.

The monetary value of this unique chart is fabulous. The Truchsess von WALDBURG, the present owner's ancestor, friend, and field marshal of Emperor CHARLES V, paid what would be the equivalent of $100 to-day. This sum with interest accrued over the four hundred years would to-day represent one trillion two hundred billion eight hundred million dollars—a stupendous sum, indeed, equivalent to the value of 1,200 steel trusts.

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### WEEKLY STEAMSHIP SERVICE BETWEEN NEW YORK AND NICARAGUA.

Beginning with December 14, 1910, the Atlantic Fruit Company have inaugurated a steamship service between New York and Nicaragua. It is planned to maintain a weekly service between these points, touching the ports of Bluefields, Pearl Lagoon, and Cape Gracias. Steamships *Stavangeren* and *Senator* are scheduled to make these trips.

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### AMERICAN EXHIBITS AT THE TURIN EXPOSITION.

Arrangements for the Turin Exposition, to be held in Turin, Italy, from April 30 to October 31, are so far advanced that the exposition could be opened now instead of in April were there need. The grounds are located in Turin's charming Valentino Park upon the right bank of the River Po. They cover an area of 247 acres, of which 68 acres will be under cover. All the buildings are to be white in color and excellently arranged in the matter of internal lighting.

The Governments of the Argentine Republic, Brazil, and Uruguay have arranged for elaborate exhibits at this exposition, while the United States has officially provided for the construction of a Government building covering 3,000 square meters of ground. It is estimated that upward of 50,000 prosperous Italians now residents in South America will sojourn to Turin during the exposition, insuring an attendance of many thousands of well-to-do Latin Americans.

The following resolution was offered by Mr. SLAYDEN, of San Antonio, for the promotion of peace and commerce through arbitration at the Trans-Mississippi Congress, held last November at San Antonio, Texas.

"Whereas in the opinion of the Trans-Mississippi Commercial Congress now in convention the peace and the commercial development of the American continent would be more certainly and speedily secured if the various South, Central, and North American Governments were reasonably assured against the forced permanent loss of territory, as a consequence of war, or otherwise: Therefore

"*Be it resolved*, That the President and the Secretary of State of the United States be requested to enter into negotiations for making of a treaty that will forever quiet the territorial titles of the various American States; and

"*Be it further resolved*, That this Congress heartily indorses the idea of the arbitration of all international disputes, and then settlement, if necessary, in the great Peace Court of the world at The Hague."

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YUCATAN AS A VISITING POINT.

Mr. WILLIAM B. YOUNG, of Progreso, Mexico, has recently visited Washington to extend the knowledge of the beauties of travel in the peninsula of Yucatan, which includes, of course, the picturesque city of Merida and the wonderful Maga ruins in the neighborhood. Mr. YOUNG also had a conference with the United States Marine-Hospital Service and endeavored to show that the quarantine against Progreso at Havana was an injustice to the traveling public as well as to the steamship lines operating between Veracruz and New York via Havana and Progreso. He further stated that Yucatan is practically free from yellow fever, and that the Port of Progreso is doing everything possible to maintain its sanitary condition.

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It is reported that the Royal Mail Steamship Co., which has just taken over the Pacific Steamship Navigation Co., will put on a line of steamers between Valparaiso and Panama that will conect with the Royal Mail Line from Colon to New York and thence to England. It is said that the voyage from Valparaiso to Liverpool can be made via New York within 23 days.

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A direct steamship line of freight and passenger steamers has been established between Argentina and Mexico. Steamers will leave Buenos Aires twice a month and will call at Progreso, Veracruz, and Tampico. It is said that both the Mexican and Argentine Governments will subsidize this steamship line.

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The American Historical Association held its twenty-sixth annual meeting in Indianapolis, Ind., December 27–30, 1910. The association is one of the largest and most active of intellectual organizations in the United States, and has as subjects for discussion not only problems of purely historical interest, but also questions of the day. This year the association intends to devote considerable time to Latin America, because it recognizes how important a part that portion of the world plays and will continue to play in history making.

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It is said that the Bates-Cheeseborough Line, operating a new line between San Francisco and Panama, intend later to make Salina Cruz a port of call. This line carries both passengers and freight.

The Pacific Mail Steamship Co. have modified their schedule as far as it concerns calling at Salina Cruz. Heretofore these steamers made this port every two weeks each way, going north and going south. Their new schedule calls for but one steamer each way a month at Salina Cruz.

The American-Hawaiian Line during the fall months, after the sugar season in Hawaii, varies the route of its large 12,000-ton steamers. From January to September these vessels make a great triangle, going from Salina Cruz to Seattle, via San Francisco, thence to the Hawaiian Islands; and thence back to Salina Cruz, laden with sugar from the islands. From September to January the route of the large steamers is from Salina Cruz to Seattle, via San Francisco, thence to the Hawaiian Islands, and thence back to Seattle, and down the coast, via San Francisco, to Salina Cruz. The fall is the season when the movement of the salmon packing especially takes place. Great quantities of California fruit, dried and preserved, and California wines are brought by this route also for transshipment across the Isthmus destined to the United States and foreign ports.

This line maintains throughout the year a service between Salina Cruz and San Francisco by three medium-size steamers, and with the augmentation during the fall of the big sugar steamers the Pacific coast has splendid facilities for the movement of its products. All of these steamers carry cargoes of general merchandise on their trips north destined to Pacific coast points and to Hawaii.

# SUBJECT MATTER OF CONSULAR REPORTS

## REPORTS RECEIVED TO DECEMBER 15, 1910.

| Title. | Date of report. | Author. |
|---|---|---|
| ARGENTINA. | | |
| Argentine Ministry of Public Works has justissued a new map of Argentina, showing especially latest development of railways. | Sept. 10 | C. H. Sherrill, Minister, Buenos Aires. |
| Educational census of Argentina | Sept. 21 | R. M. Bartleman, Consul-General, Buenos Aires. |
| Exports declared, quarter ended Sept. 30, 1910 | Sept. 30 | Do. |
| Port charges, facilities for handling cargoes, and other matters concerning importation of merchandise into foreign countries. | Oct. 1 | Do. |
| Comparative study of United States exports to China, Japan, and Argentina. | Oct. 4 | Do. |
| Permanent results of Argentina's centenary celebration | Oct. 5 | Do. |
| Bulletin of Finance (Boletin de Hacienda) | Oct. 6 | Do. |
| Mines in Argentina (transmitting publication concerning tin mining). | Oct. 7 | Do. |
| Port regulations of Buenos Aires and La Plata | ...do... | Do. |
| Exports of the United States to Argentina | Oct. 8 | Do. |
| Argentine Industrial Exposition | Oct. 9 | Do. |
| Presidential decree authorizing free entry of railway supplies | ...do... | Do. |
| Report of Argentine Ministry of Public Works, March, 1908, to March, 1910. | Oct. 12 | Do. |
| Statistics regarding exports of wool, 1909–10. (Report No. 317, July 12, 1910, continued.) | Oct. 14 | Do. |
| Trade Notes: Journey from Buenos Aires to Tupiza, Bolivia, can be made in four days—68 hours from Buenos Aires to La Quiaca, on Bolivian frontier, by rail, and 1 to 1½ days from La Quiaca to Tupiza by carriage. Population of Argentina estimated to slightly exceed 7,000,000 on Sept. 1, 1910. Rosario has slightly over 200,000 people, and La Plata 100,000. Tucuman and Cordoba have each over 75,000. Gaiman, in Territory of Chubut, declared a municipality—the southernmost in Argentina. Argentina Government doing all in its power to decentralize the population by promoting growth of ports other than Buenos Aires for the arrival and distribution of immigrants. Ministry of War has loaned Ministry of Agriculture large building for immigration station at Bahia Blanca. Dr. Elodoro Lobos, new Minister of Agriculture, promised he would do all in his power to promote growth of Bahia Blanca, especially as a distributing point for immigrants. Argentina will probably have 2 more transcontinental railways in 1913. San Antonio-Nahuel Huapi Line expected to reach San Carlos de Bariloche, on Lake Huapi, by January, 1912, which is only 70 miles to present southern terminus of Chilean railroad system—Puerto Montt. The Great Southern Railroad system pushing work on their lines in Neuquen Territory—only 170 miles to be built to connect with Chilean railways. Permanent museum of Argentine produce to be opened in Turin, Italy. Telegraph line to be laid in the Valdes Peninsula, in the Chubut Territory. Salt industry there is growing fast. United States now selling more to Argentina than to Japan and China combined, in spite of the fact that Japan and some parts of China have faster mail and freight connections with manufacturing centers of the United States than has Buenos Aires, Rosario, La Plata, and Bahia Blanca. Sales of land in rural districts of Argentina amounted to $87,987,057 Argentina paper ($37,359,504.20 United States currency) from January to August. Largest sales took place in Province of Buenos Aires, with Province of Santa Fe second, and the Territory of the Pampa Central third. | Oct. 22 | Do. |
| BRAZIL. | | |
| Overalls, etc | Sept. 1 | Jay White, consul, Santos. |
| Flooring | Sept. 6 | Do. |
| Oranges | Sept. 7 | Do. |
| Corsets | Oct. 8 | Do. |
| Toothpicks | Oct. 10 | Do. |
| Annual Report on Commerce and Industries | Oct. 17 | Do. |
| Brazilian foreign trade, January to August—8 months—1910 | ...do... | J. J. Slechta, vice-consul-general, Rio de Janeiro. |
| Growing of cocoanuts in Bahia consular district | Oct. 20 | S. P. Warner, consul, Bahia. |
| Liquor and wine dealers | Oct. 23 | Jay White, consul, Santos. |

*Reports received to December 15, 1910*—Continued.

| Title. | Date of report. | Author. |
|---|---|---|
| BRAZIL—continued. | | |
| Trade notes: Wireless system being placed on all ships operated by a large subsidized line of Brazilian steamers. This system will be placed on battle and other warships within next six months, although they are now equipped with a different system. Brazilian Government authorized establishment of a system of schools and stations for teaching agriculture in the several States. The system is more or less in harmony with plan followed in establishing schools for apprentices in the trades. Statistics of dry and salted hides from Rio Grande de Sul for period of Jan. 1 to Sept. 30, 1910. Foreign corporations engaged in conducting railroad and other enterprises in Brazil record increased earnings as a result of higher exchange value of Brazilian currency. Their receipts are, of course, in Brazilian medium of exchange, while dividends are in pounds sterling, francs, or marks. Coffee entries for current year have been small of late, owing to tendency to await lower exchange, which means better prices. A certain steamship company is to put on new passenger steamer for the Europe-Brazil and River Plata run. | Oct. 25 | J. J. Slechta, vice-consul-general, Rio de Janeiro. |
| Sale of American coal in Brazil | Oct. 27 | Do. |
| American shoe stores in Rio de Janeiro | ...do..... | Do. |
| Unification of Brazilian railways | ...do..... | Do. |
| Market for iron and steel building materials, bars and rods, etc., in Brazil. | Oct. 29 | Do. |
| Decreased production of cocoa in State of Bahia | Nov. 8 | S. P. Warner, consul, Bahia. |
| CHILE. | | |
| Market for automobiles | Sept. 27 | A. A. Winslow, consul, Valparaiso. |
| Business conditions and outlook | Oct. 8 | Do. |
| Nitrate business and its outlook | ...do..... | Do. |
| Trade and industrial notes: Chilean Government placed order for artillery to value of $2,096,618 United States gold. Railway connecting Valparaiso and Buenos Aires ascends the Andes 7,615 feet within a distance of 46 miles from Los Andes to the summit, or an average of about 166 feet to the mile. Chilean Government has taken active measures to prevent introduction of cholera into the country by having every avenue of entrance to Chile watched, and is in shape to combat the disease should it break out within its borders. Industrial Exposition at Valparaiso opened last week and promises to be well attended. To be kept open for 4 or 5 months. Chilean Government completed plans for water works at Los Anjeles, La Calera, and San Carlos. Notice for bids for installation of plants at these cities will soon be published by the Ministerio de Industria y Obras Publicas, Santiago, Chile. Reports that a certain steamship company will put on a line of steamers between Valparaiso and Panama to connect with another line from Colon to New York and thence to England. Voyage from Valparaiso to Liverpool expected to be made via New York in 25 days. | ...do..... | Do. |
| Coal production in Chile | Oct. 15 | Do. |
| New dry dock at Talcahuano | Oct. 17 | Do. |
| Manufacturing in Chile | ...do..... | Do. |
| Cost of living in Chile | Oct. 18 | Do. |
| Trade and industrial notes: There are 32 distilleries and 55 breweries in Chile that pay the Government about $1,000,000 United States gold each year as revenue tax. Chilean exports for first 7 months of 1910 amounted to $55,966,135 United States gold, against $51,754,813 for 1909. Gain was almost entirely in nitrate. Government estimate for running public schools of Chile for year 1911 amounts to $6,606,953 United States gold, of which a large portion is to be expended on new building and equipment. During first 9 months of 1910 there were 1,970 tons less of copper exported from Chile than for same period during 1909. Chilean Government has under consideration the construction of an irrigation plant near Melipilla by means of a tunnel leading from Maipo River, 1¼ miles long, that will irrigate 26,548 acres of land. Chilean deficit for 1910 estimated at 53,000,000 pesos or $19,345,000 United States gold, and to overcome this during the next year it is proposed by Congress to practice rigid economy and to undertake no new works during 1911. Attendance at a Government business and commercial school in Valparaiso reached 729 during the year 1910. There are evening classes for employed, and course is quite thorough and covers classes in all commercial languages of the country. | ...do..... | Do. |
| Port charges, facilities for handling cargoes, and other matters concerning importation of merchandise into foreign countries. | Oct. 27 | Rea Hanna, consul, Iquique. |

*Reports received to December 15, 1910*—Continued.

| Title. | Date of report. | Author. |
|---|---|---|
| CHILE—continued. | | |
| Fire insurance in Chile | Oct. 31 | A. A. Winslow, consul, Valparaiso. |
| Nitrate concession organized | ...do.... | Do. |
| Concession for railway construction | ...do.... | Do. |
| Railroad concession | ...do.... | Do. |
| Manufacture of silk in Chile | Nov. 1 | Do. |
| What the Panama Canal is expected to do along the west coast of South America. | Nov. 4 | Do. |
| Trade and industrial notes: Deposits in savings banks of Chile increased $542,764 United States gold during the 5 months ending Sept. 30, 1910. According to Chile's census taken in 1907, there are 24 cities exceeding 10,000 population, with a total of 924,041 out of a total population of 3,249,279 for the entire country. According to late report, there are 1,574 tenement houses in Santiago, Chile. There are 4,758 industrial establishments in Chile, with invested capital of $281,209,523 United States gold, giving employment to 75,174 persons. During October 37.2 miles of new rails were laid on the Government railways of Chile, and during quarter ending Sept. 30, 1910, the Government expended $1,748,987 United States gold on new construction. Chilean Government has made extensive investigations for petroleum in vicinity of Punta Arenas, with the result that some oil was found, and surroundings indicate that large quantities may be found in these parts. Gas was found escaping in one place in sufficient quantities to burn when ignited. | Nov. 15 | Do. |
| COLOMBIA. | | |
| Market for cement | Sept. 22 | Chas. H. Small, vice and deputy consul-general, Bogota. |
| Translation of law regarding the registration of foreign companies permanently established in Colombia. | Sept. 26 | Do. |
| CUBA. | | |
| Budget for fiscal year 1911 and 1912 submitted by President Gomez to Cuban Congress on Nov. 14, 1910. | Nov. 19 | John B. Jackson, minister, Havana. |
| Iron wire (tariff No. 41, a, b, and c) will be exempted from the 30 per cent surtax placed upon it by Executive Decree of Feb. 1, 1904, etc., dated Nov. 23, 1910. | Nov. 23 | Do. |
| DOMINICAN REPUBLIC. | | |
| Cost of living in the Dominican Republic | Oct. 27 | P. E. Holland, consul, Puerto Plata. |
| Lotteries in the Dominican Republic | Nov. 11 | Do. |
| Soap factories in the Dominican Republic | Nov. 16 | Do. |
| Use of plantain meal in the Dominican Republic | Nov. 17 | Do. |
| Sources of water supply and use of filters in Puerto Plata consular district. | Dec. 12 | Do. |
| ECUADOR. | | |
| Proposals for construction of 117 kilometers of railroad from city of Ambato, Ecuador, to the river Arajuno. | Oct. 27 | H. R. Dietrich, consul-general, Guayaquil. |
| GUATEMALA. | | |
| Moving pictures | Oct. 7 | M. F. Friely, consular agent, Champerico. |
| Market for corrugated-iron roofing | ...do.... | Do. |
| Market for hosiery | Oct. 10 | Geo. A. Bucklin, jr., consul-general, Guatemala City. |
| Market for parquetry flooring | ...do.... | Do. |
| Market for spray-brushes | ...do.... | Do. |
| Market for American furniture | ...do.... | Do. |
| Market for contractors' supplies | Oct. 27 | Do. |
| Market for American hardware | Oct. 28 | Do. |
| Translation of treaty published in "El Guatemalteco" issue of Nov. 7, 1910 (relative to commerce between the Central American Republics). | Nov. 10 | Do. |
| HONDURAS. | | |
| No motion-picture theaters in Amalpa | Oct. 15 | G. Schmuck, consul, Amalpa. |
| Rate of exchange for month of September averaged 270 per cent. | Oct. 19 | A. T. Haeberle, consul, Tegucigalpa. |
| Census of 1910 in Honduras | Nov. 1 | Do. |

*Reports received to December 15, 1910*—Continued.

| Title. | Date of report. | Author. |
|---|---|---|
| HONDURAS—continued. | | |
| Waterworks concession at Puerto Cortes | Nov. 4 | C. I. Dawson, consul, Puerto Cortes. |
| Truck gardening in Honduras | Nov. 16 | Do. |
| Artificial lighting in Honduras | Nov. 25 | Do. |
| Sale of optical goods abroad | Nov. 28 | Do. |
| Prices of beer, etc | ...do | Do. |
| MEXICO. | | |
| Coffee in Soconusco, Chiapas | Sept. 26 | A. W. Brickwood, jr., consul, Tapachula. |
| Railways in Chiapas, Mexico | Oct. 7 | Do. |
| Crop report | Oct. 18 | A. D. Smith, consul, Aguascalientes. |
| Market for motor wagons | ...do | A. J. Lespinasse, consul, Frontera. |
| Market for furniture | Oct. 19 | Do. |
| Market for rubber tires and rubber goods | ...do | Do. |
| Market for parquetry flooring | ...do | Marion Letcher, consul, Acapulco. |
| Market for carpet sweepers | ...do | Do. |
| Market for rubber tires | ...do | Do. |
| Market for horse-clipping and sheep-shearing machines | Oct. 20 | Do. |
| All-rail route to Central America | Oct. 21 | A. W. Brickwood, jr., consul, Tapachula. |
| Colossal Spanish colony project in Chiapas | ...do | Do. |
| Prospects for investments in henequen industry | Oct. 25 | G. B. McGoogan, consul, Progreso. |
| Oil-producing plants | Oct. 31 | T. W. Voetter. |
| Port charges, facilities for handling cargoes, and other matters concerning the importation of merchandise into foreign countries. | Nov. 1 | C. A. Miller, consul, Tampico. |
| Artesian wells in San Luis Potosi | ...do | W. L. Bonney, consul, San Luis Potosi. |
| New international bridge between Matamoros and Brownsville | Nov. 1 | P. C. Hanna, consul-general, Monterrey. |
| Experimental agricultural station in Oaxaca | Nov. 2 | E. M. Lawton, consular agent, Oaxaca. |
| Trade reciprocity and how to sell American goods abroad | Nov. 3 | Do. |
| Market for stoves | Nov. 4 | R. M. Stadden, vice and deputy consul in charge, Manzanillo. |
| Market for cotton bats | ...do | Do. |
| Value of catalogues and publications. American trade will be benefited more by having traveling salesmen. | ...do | Do. |
| Maritime movement at Mazatlan | Nov. 7 | W. E. Alger, consul, Mazatlan. |
| American trade opportunities in Mexico | ...do | A. B. Garrett, consul, Nuevo Laredo. |
| Increase in exports from the United States to Mexico | ...do | Do. |
| Report on increasing American trade by use of traveling salesmen and printed matter. Uselessness in sending catalogues, etc., to consuls. | ...do | R. M. Stadden, vice and deputy consul in charge, Manzanillo. |
| Photographic supplies | Nov. 8 | S. Magill, consul, Guadalajara. |
| Sale of optical goods abroad | Nov. 9 | A. V. Dye, consul, Nogales. |
| Tampico notes: New steamship line. American school in Tampico. Oil. Movement to organize producers of fruit, truck, and other agricultural products. Fiber from banana plants. | ...do | C. A. Miller, consul, Tampico. |
| Port charges, facilities for handling cargoes, and other matters concerning importation of merchandise at San Benito, Chiapas, Mexico. | ...do | A. W. Brickwood, consul, Tapachula. |
| Construction of wharf at Ensenada. Opportunity for American exporters. | Nov. 10 | Geo. B. Schmucker, consul, Ensenada. |
| Coffee prospects | ...do | A. W. Brickwood, consul, Tapachula. |
| Metal ceilings | Nov. 11 | E. M. Lawton, consular agent, Oaxaca. |
| Optical goods in Chiapas | ...do | A. W. Brickwood, consul, Tapachula. |
| Population of Salina Cruz, Mexico | Nov. 12 | L. W. Haskall, consul, Salina Cruz. |
| Shipping at Salina Cruz, Mexico | ...do | Do. |
| Importation of merchandise at the port of La Paz | ...do | L. N. Sullivan, consul, La Paz. |
| Imports into Mexico—articles needed | ...do | G. B. Schmucker, consul, Ensenada. |
| Of interest to American exporters | Nov. 15 | Wm. E. Alger, consul, Mazatlan. |

*Reports received to December 15, 1910*—Continued.

| Title. | Date of report. | Author. |
|---|---|---|
| MEXICO—continued. | | |
| Report giving list of delegates attending the inauguration of Mexico's National University. | Nov. 21 | A. Shanklin, consul-general, Mexico, D. F. |
| Proposed railroad to Tampico and land it will tap | ...do..... | J. H. Johnson, consul, Matamoros |
| Sale of optical goods abroad | Nov. 22 | L. J. Keena, consul, Chihuahua. |
| Waterloo cement machinery corporation | Nov. 23 | P. C. Hanna, consul-general, Monterey. |
| Opportunity for printers and lithographers—New Year cards | Nov. 25 | G. B. Schmucker, consul, Encenada. |
| NICARAGUA. | | |
| Forwarding Spanish text and English translation of decree declaring certain ingredients for the manufacture of soap free from import duties. | Oct. 7 | José de Olivares, consul, Managua. |
| PANAMA. | | |
| Prices of beer | Nov. 19 | J. C. Kellogg, consul, Colon. |
| European method of advertising | Nov. 26 | Do. |
| PARAGUAY. | | |
| Default of transportation to South America | Sept. 29 | C. Ferris, jr., consul, Asuncion. |
| No use for automobiles in Paraguay | Oct. 10 | Do. |
| Sale of typewriters in Asuncion | Oct. 15 | Do. |
| Possible market for ready-made clothing | Oct. 18 | Do. |
| Methods of introducing foreign goods into Paraguay | Oct. 24 | Do. |
| URUGUAY. | | |
| Cultivation of tobacco in Uruguay | Oct. 10 | F. L. Goding, consul, Montevideo. |
| New steamship line for the River Plate—Frozen-meat trade | Oct. 13 | Do. |
| Customs receipts of Uruguay for September, 1910 | Oct. 15 | Do. |
| Uruguay agricultural live-stock census, 1908 | Oct. 24 | Do. |
| VENEZUELA. | | |
| Decree regarding various sanitary articles | Oct. 26 | S. Whitehouse, chargé d'affaires, Caracas. |
| Films for cinematographs | Oct. 28 | Do. |
| More "mixed" packing from the United States | Nov. 4 | I. A. Manning, consul, La Guaira. |
| Guns and revolvers in Venezuela | Nov. 10 | Ralph Totten, consul Maracaibo. |
| The first steamboat built in Venezuela | Nov. 11 | H. R. Wright, consul, Puerto Cabello. |
| Various tariff changes in Venezuela | Nov. 12 | I. A. Manning, consul, La Guaira. |

# ARGENTINE REPUBLIC

## DIPLOMATIC CHANGES.

According to a dispatch published in the "Figaro" of December 4, Mr. VICENTE DOMINGUEZ will be appointed Minister of the Argentine Republic at London, Mr. ROMULO S. NAON, at Washington, and Mr. EPIFANIO PORTELA at Rome.

## ARGENTINE STUDENTS VISITING UNITED STATES.

Prof. ERNESTO NELSON, of the University of La Plata, who was educated at Cornell and at Columbia Universities, sailed from Buenos Aires the latter part of November with a party of four young Argentine students. The party are to spend their vacation, December–March, traveling through the United States, visiting New York, Washington, all the leading universities, and many industrial and manufacturing centers.

The young men in the party are all of prominent families. RAÚL ALVAREZ is son of Dr. AUGUSTÍN ALVAREZ, vice-president of the University of La Plata; the father of EMILIO ESTEBAN GONZALEZ was twice a member of the Argentine Cabinet and is at present a Senator; OSCAR E. ACHINELLI is a member of a distinguished Buenos Aires family, while OSCAR LOPEZ CAMELO is well known at La Plata.

## PERMANENT RESULTS OF ARGENTINA'S CENTENARY CELEBRATION.

In view of the permanent improvements to the Argentine Republic, resulting from its recent centenary celebration, special commendation is due to those who were in charge of the preparations for the sound judgment and foresight displayed. Aside from the beneficial publicity to the nation, many new buildings and monuments have been added; which contribute greatly to the beauty of the city.

Nearly $6,000,000 has been expended upon the "Plaza del Congreso," the magnificent and spacious breathing place in front of the Federal Congressional Palace. It is situated in front of the Avenida de Mayo and is faced by the largest business block south of St. Louis, on the two American continents.

Commemorative high-school buildings have been provided for at Parana, San Juan, Santiago del Estero, Catamarca, Corrientes, Santa Fe, La Plata, and La Rioja. Those at Parana and Santiago del Estero will accommodate 888 pupils each and the others 444 pupils. Each building will be equipped with gymnasiums and libraries and cost over $200,000. In the city of Buenos Aires the beautiful

Mariano Moreno High School has just been completed, commemorative of the centenary, while the law school of the University of Buenos Aires has received a gift of $191,070 for the purchase of land.

Along literary and historical lines a historical chart of the Republic has been prepared; important literary and instructive works have been published, aided financially by the Government.

Several monuments will also now adorn the city as a result of the celebration. A beautiful statue to MARIANO MORENO was dedicated in the Plaza del Congreso; statues to PASO, CASTELLI, RODRIGUEZ PEÑA, and SAAVEDRA have been placed in the public parks of Buenos Aires. A large equestrian statue of BARTOLOMÉ MITRE is soon to be completed, and the DEÁN FUNES monument has been unveiled at Cordoba in the University grounds. A memorial to RIVADAVIA is soon to be built by popular subscription.

## UNITED STATES EXPORTS TO ARGENTINE REPUBLIC, 1899–1909.

Vice-Consul CHARLES LYON CHANDLER at Buenos Aires submits the following interesting table showing the value of United States exports to the Argentine Republic from 1899 to 1909:

| Year. | Value of exports (United States gold). | Year. | Value of exports (United States gold). |
|---|---|---|---|
| 1899 | $9,563,510 | 1905 | $23,564,056 |
| 1900 | 11,558,237 | 1906 | 32,673,359 |
| 1901 | 11,537,668 | 1907 | 32,163,336 |
| 1902 | 9,801,804 | 1908 | 31,858,155 |
| 1903 | 11,437,570 | 1909 | 33,712,505 |
| 1904 | 16,902.017 | | |

## EDUCATIONAL CENSUS OF THE ARGENTINE REPUBLIC.

A summary of the educational census of May 23, 1909, has recently been received from the office of the American consul general at Buenos Aires. Notable are the figures covering the Government expenditures for educational purposes. In 1881 $33,294.95 (United States gold) was spent for primary education; in 1907, the banner year, it reached $3,566,402.71, over 100 times as much. The average at present is $3,500,000 a year. In 1909 the Government spent $10,898,673.75 on education, an amount equal to that spent on the army and navy combined.

There are at present 5,321 primary schools, with 614,680 pupils and 18,571 teachers; also 42 normal schools, with 2,186 teachers. For secondary instruction, there were, in 1909, 26 "colegios nacionales" with 812 teachers; these are preparatory schools for the three national universities. About $400,000 a year is spent on the six commercial high schools, which have an aggregate attendance of approxi-

mately 2,000 pupils. There are, in addition, schools for deaf-mutes, a national school of chemistry at San Juan, normal school of physical education, national lycée for girls, and a national institution for training teachers for secondary instruction. Fifteen of the 58 Argentine Government scholarship holders in 1909 were studying in the United States, the balance in Europe.

A few other interesting facts gleaned from the census are: Only 11 per cent of the children of school age in Buenos Aires are illiterate; the first kindergarten in South America was founded in 1868 in Buenos Aires through the influence of Miss Elizabeth Peabody, of Boston; the first Argentine Commercial School was founded in 1890, but was reorganized and the entire system of commercial instruction classified in 1905. The National Industrial School founded in 1898 with 30 students to-day has over 600. Physical instruction is an important part in the curriculum of all the schools in the Republic.

## PROPOSED NATIONAL TELEPHONE SYSTEM.

By a recent law of the Congress of the Argentine Republic the Executive is authorized to appoint such commissions as he deems expedient to study the feasibility of constructing a telephone system covering the whole territory of the Republic. The results of these studies are to be embodied in reports and submitted to the first ordinary session of the Congress of 1911, together with estimates of the cost of the proposed system.

The President is authorized to spend the sum of 50,000 pesos paper (about $22,000 gold) for this purpose.

## THE SUGAR INDUSTRY.

Statistics from the latest official publications received show clearly the remarkable progress in the sugar industry of the Argentine Republic during the last few years.

As a result of this development, which has been so beneficial to the northern region of the country, there have been established many manufacturing plants, contributing largely to the industrial aggrandizement of the Republic.

Sugar cane is cultivated over an area of 70,712,279 hectares, distributed as follows among the Provinces: Tucuman, 61,802,961; Jujuy, 3,178,899; Chaco Territory, 2,217,971; Santa Fe, 952,236; Misiones, 785,167. The balance is distributed among the following in order of importance: Corrientes, Salta, Entre Rios, Buenos Aires, Santiago del Estero, Catamarca, San Luis, and La Rioja, and the Territories of Pampa and Formosa, whose lands are particularly adapted to the cultivation of sugar cane.

As the above figures indicate, over 85 per cent of the total area devoted to this industry is located in the Province of Tucuman.

Of the 37 sugar mills in the Republic, 28 are in Tucuman, 2 in Jujuy, 2 in Santa Fe, 2 in Chaco, 1 in Salta, 1 in Corrientes, and 1 in Formosa.

These establishments, mostly owned by Argentinians, are capitalized at 74,416,933 pesos paper (about $16,912,939 gold), and sell annually, products valued at 46,730,697 pesos (about $10,620,610 gold).

There are engaged in the various branches of this industry 38,591 persons, of which 8,335 are employed in the mills and the rest in the fields and other departments.

An idea of the rapid development of the Argentine sugar industry may be had by comparing the production of 1891 with that of 1907. In the former year it reached a total of 46,366 tons, and in order to meet the domestic consumption, 12,836 tons of sugar had to be imported.

In 1907, however, the production amounted to 109,445 tons, or an increase of 136 per cent in sixteen years. The sugar crop of 1910 is officially estimated at 115,000 tons.

## IRRIGATION WORKS IN THE SOUTH.

The President of the Argentine Republic has recently approved the contract entered into between the Minister of Public Works and the Buenos Aires Great Southern Railway Co. for the execution of irrigation works in the valley of the Neuquen River and the Rio Negro.

According to the terms of the contract the company is merely the constructor of the works while the department of public works will have charge of preparing the plans and appointing the technical staff.

The works to be executed by the Great Southern Railway Co. are those comprised in the first section of the zone of the valleys, i. e., between Lake Pellegrini and the Chinchinales station. A barrage is to be thrown across the Neuquen River and an intake canal will be cut at this point for the irrigation works. In connection with this barrage there is to be a canal for the diversion of the flood waters into a large natural basin, known as the "Cuenca Vidal."

The cost of the works is estimated at $4,032,000 gold. The Executive believes that the irrigation tax, although very low, will be sufficient to cover the service of the irrigation bonds that will be issued, and even the maintenance charges of all the canals.

## THE WHEAT, FLAX, AND OATS CROP.

According to figures just received from Division of Statistics of the Department of Agriculture of Argentina, the output of wheat, flax, and oats, by Provinces, during the agricultural year 1909–10, was as follows:

| Provinces. | Wheat. | Flax. | Oats. |
|---|---|---|---|
| | *Tons.* | *Tons.* | *Tons.* |
| Buenos Aires | 1,340,299 | 281,762 | 495,745 |
| Santa Fe | 470,077 | 207,500 | 4,366 |
| Cordoba | 1,240,528 | 110,541 | 4,982 |
| Entre Rios | 154,508 | 100,697 | 10,799 |
| Pampa Central | 300,214 | 15,615 | 10,679 |
| Other Provinces and Territories | 60,000 | 500 | 3,000 |
| Total | 3,565,626 | 716,615 | 529,571 |

Of these amounts, there were exported up to September last 1,757,000 tons of wheat (including flour), 596,000 tons of flax, and 298,500 tons of oats.

While this output was not as large as that of 1908–9, due to adverse weather conditions, its value was greater, due to the rise in prices of cereals in the world's market. The value of the production for 1909–10 was, wheat, $320,000,000; flax, $115,000,000; oats, $28,000,000; making a total of $463,000,000.

## NEW DIRECT LINES WITH EUROPE.

"The London Financial News" for December 6, 1910, announces that, in addition to large increases that are being made to the fleets of the various steamship lines running between England and Argentina, two new services have been projected from the Continent.

In conjunction with the Hamburg-American Line, the Hamburg South American Company has approached the Argentine Minister of Agriculture with an offer to establish a direct passenger service between Europe and Bahia Blanca on condition that no subsidy is paid to any competing concern. It is understood that the proposal is receiving favorable consideration.

Capitalists interested in the industries of Italy and Argentina are also about to form a company for the purpose of running a service of fast steamers between the Mediterranean, Buenos Aires, and Bahia Blanca, with direct transshipment of cargoes to vessels which call at Patagonian coastal points and travel up the Parana. The line to Bahia Blanca will be engaged chiefly in the transport of emigrants.

## PURCHASE OF SANITARY MATERIAL.

The Congress of the Argentine Republic has authorized the Executive to invest a sum not exceeding 1,000,000 pesos paper (about $440,000 United States currency) in the construction of buildings and purchase of sanitary equipment for the National Provinces and Territories. He is further authorized to invest not over 500,000 pesos paper (about $220,000 United States currency) in the purchase of stationary and floating material for the maritime sanitary defense of the ports of the Republic.

The same act provides for the organization of a disinfecting corps of 500 men and a sanitation corps of an equal number.

### PETROLEUM IN THE TERRITORY OF CHACO.

The Department of Public Works of the Argentine Republic was recently informed from Chaco that when boring for water on the *Quimilo-Estancia*, on the Anatuya Railway, the drill struck an extensive vein of asphalt—a certain indication of the presence of petroleum. The dimensions of this deposit and its depth below the surface are not yet known.

### THE PORT OF BAHIA BLANCA.

The port of Bahia Blanca, which, on account of its geographical situation and its deep and well-protected bay, is one of the most important in the Argentine Republic, has progressed remarkably in a short period. Its development will receive a still greater impetus within the next few years because of the rapid growth of the cattle industry in the surrounding country and of the establishment of a large and rich agricultural zone of unusual adaptability to the cultivation of wheat and other cereals.

The port of Bahia Blanca exported during 1909 products valued at $47,848,379 gold, representing 12 per cent of the total exports of the Republic; and during the first half of 1910 its exports amounted to $28,456,659, or 14.7 per cent of the total exports.

These figures are indeed interesting when compared to the exports of twenty-eight years ago. In 1882 Bahia Blanca was credited in the statistics with only $2,652 gold, in exports, which two years later increased to $380,000, or 0.5 per cent of the total value. In the following years the increase has been steady: 1887, $1,119,000, or 1.3 per cent; 1890, $3,068,084, or 3 per cent; and 1909, $47,848,379, or 12 per cent.

Bahia Blanca is now the third commercial port of Argentina.

### BRIDGES IN CORRIENTES.

By a law of the Argentine Congress, the Executive is authorized to order the construction of bridges over the rivers Santa Lucia, Aguapay, and Mirinay, and over the rivulets Curuzu-Cuatia, Ayui Sarandi, and Genova, in the Province of Corrientes.

For the surveys and estimates the Executive is empowered to spend the sum of 30,000 pesos paper (about $13,200 gold), and in the first ordinary session of the Congress of 1911, he shall submit a report of the amount necessary for the construction of these bridges.

The same law authorizes the President to spend 150,000 pesos paper (about $66,000 gold) in surveying the Riachuelos and Maloyas creeks in order to ascertain their hydrographic structure and the best manner of utilizing them for the public service.

## RAILROAD NOTES.

### THE SOUTH AMERICAN RAILWAY CONGRESS.

The First South American Railway Congress was held in Buenos Aires from October 18 to October 30, 1910. Representatives were present from the Argentine Republic, Brazil, Chile, Peru, and Uruguay. Proceedings were opened by the Minister of Public Works, and the Chief of the Argentine Railway Department was appointed president of the Congress. Papers of unusual importance were read by some of the leading railway men of the nations represented.

### THE DEAN FUNES-LAGUNA PAIVA RAILROAD.

During the latter part of October the construction of the railroad line from Dean Funes to Laguna Paiva, a distance of 400 kilometers, was completed.

This new line is of considerable importance to the development of many agricultural regions, as it extends from the coast of Sante Fe Province to Dean Funes, a town on the northernmost section of the Province of Cordoba. It starts from Laguna Paiva and passes through Iriondo, Progreso, Ataliva, and P. Marini, in Santa Fe, whence it crosses the vast zone between that point and Avellaneda, in Cordoba. From here it extends northward as far as Dean Funes.

### BRANCH LINE FROM RECONQUISTA.

Upon recommendation of the Director-General of Railroads of the Argentine Republic, the Minister of Public Works has approved the plans, specifications, and description presented by the Santa Fe Railway Company for the construction of a branch line starting at Reconquista and extending northward for a distance of 40 kilometers.

### LA ZANJA RAILROAD BRANCH.

The Department of Public Works of the Argentine Republic has authorized the Buenos Aires Western Railroad Company to construct and operate a branch line, 78 kilometers long, to connect the La Zanja station with that of Meridiano V.

## MISCELLANEOUS CONSULAR NOTES.

There have been shipped 378,422 bales of wool from the ports of the Argentine Republic during the year October 1, 1909–September 30, 1910. Of this amount 31,013 bales were sent to the United States from Buenos Aires and Rosario.

For the fiscal quarter ending September 30, 1910, the declared exports from the Argentine Republic amounted to $3,724,602.84.

The largest industrial exposition ever held in Argentina is now in progress and will remain open until March, 1911.

A report has been published by the Minister of Public Works of the Argentine Republic containing considerable valuable information regarding the development of public and private railways in the Republic, highways and bridges constructed, port works, dredging, irrigation, sewerage systems, and other public improvements for the period of March, 1908, to March, 1910.

# BOLIVIA

## DEVELOPMENT OF TRANSANDEAN TERRITORY.

The Bolivian Government is taking steps to develop the territory on the Upper Paraguay River. With this end in view it has decided to create a new department in the region drained by the upper waters of this stream, to be known as the "Departamento de los Chiquites." The capital of the new department will be Puerto Suarez, a prosperous city on the Paraguay River. The Government is already planning to colonize this territory, and a railway is proposed from Santa Cruz to Puerto Suarez.

## THE FINANCIAL SITUATION.

Señor GUTIERREZ GUERRA, the well-known Bolivian economist, has recently published an excellent book entitled "Estadística Bancaria," on the banks of Bolivia. One of its chapters is devoted to the general financial situation of the Republic, from which we quote the following:

The favorable market prices of our export products, which were firmly maintained throughout the first half of the current year (1910), have contributed greatly to the betterment of the economic situation of the Republic.

Our commercial crisis has disappeared, and we are entering upon an era of prosperity which, if wisely availed of, will place the country upon a solid financial basis, which in the future will enable us to meet with greater firmness any of those economic commotions which periodically invade countries.

The introduction of foreign capital, for one purpose or another, has served satisfactorily to strengthen the national finances.

The foreign loan for the Light and Power Company has brought into the country £270,000; the sale of the Guaqui Railway £134,000; from the northwest the Government has derived an extraordinary revenue of £25,000.

These sums, which together represent over 5,000,000 bolivianos, have established the stability of international exchange at an adequate rate.

The increase of capital of the National Bank by the sum of 500,000 bolivianos and that of the Mercantile Bank to the amount of 2,200,000 bolivianos have mobilized anew the powerful element of credit. These institutions have now thrown their doors wide open to honest commerce, and, as a consequence of the increase of capital, the rate of interest is lower.

## TELEGRAPH MOVEMENT IN 1909-10.

The Bolivian Minister in Washington has furnished the Pan American Union with a copy of the annual report of the Director General of Telegraphs of the Republic for 1909–10. According to this well-edited and comprehensive document, the telegraph and cable movement of Bolivia during 1909–10 was as follows:

| | Issued. | | Received. | | Revenue (bolivianos). |
|---|---|---|---|---|---|
| | Messages. | Words. | Messages. | Words. | |
| Government lines | 276,974 | 5,769,219 | 295,499 | 6,407,060 | 198,621.16 |
| Telegraph Company of Bolivia | 19,837 | 321,946 | 17,312 | 254,341 | 148,298.08 |
| Antofagasta Railway | 86,447 | 2,386,389 | 87,525 | 2,558,101 | 2,981.47 |
| Guaqui Railway | 34,563 | 762,879 | 36,588 | 696,241 | 17,846.23 |
| Huanchaca Company | 4,771 | 81,948 | 5,665 | 83,254 | 5,011.37 |
| Bolivia Railway | 22,948 | 328,980 | 23,011 | 329,308 | 1,089.00 |
| Total | 445,540 | 9,651,361 | 465,600 | 10,328,305 | 373,847.31 |

## THE BISMUTH INDUSTRY.

The Republic of Bolivia occupies a prominent place among the very few bismuth-producing countries, said to be three in all.

In Bolivia bismuth is generally exploited with other metals from which its separation is easy. It is found in the mineral zone between Huayna-Potosí, in La Paz, and Chorolque, in Potosí; the principal region is that of Tazna.

It is perhaps a well-known fact that the production of bismuth has been subject to monopoly control. For this reason the prices of bismuth do not undergo any material fluctuations, and it may be noticed that for several years the price of this metal has been maintained at 9,150 bolivianos per metric ton.

From 1904 to 1909 the bismuth exported from Bolivia has amounted to 1,220,824,280 kilos, valued at 7,047,399.60 bolivianos, or an annual average of 203,470,713 kilos, valued at 1,174,566.60 bolivianos.

At present, one quintal of bismuth in bars pays an export duty of 10 bolivianos, and one quintal of bismuth in small bars, 7 bolivianos, by virtue of the law of February 9, 1910.

## THE CULTIVATION OF RUBBER.

Next to tin the most important product of Bolivia is rubber, the annual export value of which is estimated at $4,000,000. The exploitation of the rubber lands is regulated by law through a tax of 1 boliviano yearly. The principal areas lie in the northeast, near the Peruvian boundary; in the east in the Provinces of Santa Cruz and Azero, and in the Acre and Beni territory, which is exceptionally rich in its yield.

The Acre is watered by several large rivers originating in the Cordillera, and flowing into the Amazon. Those rivers are the Beni, Madre de Dios, the Orton, and the Acre. The capital, Puerto Acre, is connected by water with the important Brazilian commercial town of Manaos.

There are about 25,000 Europeans, Brazilians, and Asiatics in the Acre.

Two varieties of rubber plant are found in this Territory, the caucho, which has to be cut down in order to extract the sap, and the Hevea, which is merely tapped. In some cases the trees are tapped for a period of two years, and are then rested for a similar term. Other rubber trees are tapped for six years at a time and then left untouched for a like period. The trees selected for tapping in the Acre are usually from thirty to forty years of age, and are expected to yield for 20 years, after which they become useless.

### EXTENSION OF THE ANTOFAGASTA-ORURO RAILWAY.

The Bolivian Government has entered into a contract with the Antofagasta Railway Company for the extension of its lines to La Paz, and thence eastward as far as the Yungas. Accordingly, the Antofagasta Railway will reach the capital on its own rails, becoming independent of the Peruvian corporation.

There will, therefore, be two railroads to La Paz, now, the Guaqui Railway, of the Peruvian Corporation, which descends from the north, and the Antofagasta line, from the south. The former is an electric road, while the latter is steam.

### EXPORTS FROM NEW YORK TO BOLIVIA, NOVEMBER, 1910.

The following table showing the articles of merchandise exported from New York to Bolivia during the month of November, 1910, has just been received. The data are taken from a statistical table prepared by the Consul-General of Bolivia in New York, and supplied to the Pan American Union by Señor Don Ignacio Calderon, the Minister of Bolivia at Washington:

| | |
|---|---|
| Cotton goods | $35,340.69 |
| Machinery | 4,507.35 |
| Foodstuffs and beverages | 2,193.75 |
| Kerosene | 1,725.86 |
| Hardware | 1,450.97 |
| Miscellaneous | 24,095.94 |

### EXPORTS FROM SAN FRANCISCO TO BOLIVIA, JULY-SEPTEMBER, 1910.

From the Bolivian Minister at Washington comes also the following table showing the exports to Bolivia through San Francisco for the months of July, August, and September, 1910:

| Month. | Value of exports. |
|---|---|
| July | $34,678.43 |
| August | 54,805.40 |
| September | 88,402.33 |
| Total | 177,886.16 |

# BRAZIL

## GROWTH OF CATTLE INDUSTRY.

The returns of the cattle census in Brazil show a remarkable development in this industry, particularly in the States of Rio Grande do Sul, Minas, and Sao Paulo. The State of Rio Grande do Sul now supplies to the home markets about 15,000,000 kilos of lard annually and has recently commenced exporting this product to Germany.

It is stated that the tanneries of Rio Grande do Sul are now producing patent and morocco leathers equal in quality to the imported product. This State has also greatly increased its cereal output, producing annually 260,000 bags of wheat and 400,000 bags of rice. In this State about 33,730 square meters is devoted to agriculture.

## ENCOURAGEMENT OF SMELTING INDUSTRY.

The Government of the State of Rio de Janeiro is offering special inducements for the establishment of the smelting industry in that State. A recent decree grants exemption, for a period of ten years, from the payment of industrial and export taxes, to the first company which shall establish an iron smelting and manufacturing plant in this State.

## NEW INDUSTRIAL ENTERPRISES.

A French company registered under the name of "*Société Franco Brésilienne de Travaux Publics*" has recently been authorized to operate in Brazil. The company was incorporated at Paris, with a capital of 1,000,000 francs, and under its charter is empowered to build and operate port works, railways, electric tramways, wagon roads, irrigation and drainage works, lighting, etc.

## NEW NAVIGATION SERVICE.

Messrs. Rocha Silva & Co., of Belem, Para, have recently obtained a concession to establish a line of steamers between that point and the ports on the Yaco River, in the Acre Territory.

### EXTENSION OF TELEGRAPH SYSTEM.

The Department of Communications and Public Works has been granted an appropriation of 110 contos for establishing telegraph communication between Porto Murtinho in the State of Matto Grosso, and the Paraguayan frontier at S. Carlos, and between the city of Goyaz and Boa Vista in the State of Goyaz.

### REDUCTION OF PUBLIC DEBT.

The Minister of the Treasury reports that during the current year the public debt of Brazil has been reduced by £3,121,961–1–11.

### AGRICULTURAL EDUCATION.

The "Diario Official" of October 27, 1910, contains the text of the presidential act establishing a system of agricultural schools in Brazil. The regulations provide for a course of theoretical and practical instruction in agriculture, veterinary science, stock-raising and the rural industries. The decree further provides for the establishment of an Agricultural and Veterinary High School in the Federal District, the courses of which should fit young men for positions in the Department of Agriculture, in agricultural schools and colleges, and experimental stations. Agricultural schools teaching theoretical and practical farming will also be established in various parts of the country, with a course of study covering a period of three years. Theoretical instruction in the class room will be followed by practical work in the laboratories and experimental farms. An apprentice system is also provided for training the children of farmers and rural laborers in the proper handling of agricultural machinery and instruments, farm sanitation, treatment and feeding of domestic animals, etc.

### REPORT OF EDUCATION COMMITTEE.

The committee appointed by the Department of Justice and the Interior to reorganize secondary and higher education in Brazil has submitted its report. It recommends that secondary, as well as higher educational institutions, should be so reorganized as to permit the introduction of modern methods of instruction, and that the primary schools be still further extended.

### NEW POSTAGE STAMPS.

The new postage stamps of Brazil were put in circulation on November 15 last. One of the new stamps shows the portrait of the late Dr. Prudente de Moraes on an olive-colored ground, and another bears the portrait of the present President of Brazil, on a background of light brown.

### LEASE OF RIO WHARF TRANSFERRED.

By a presidential decree of November 9, 1910, the contract for the lease of the Rio port works has been transferred to the *Compagnie du Port de Rio de Janeiro.*

### NEW BOND ISSUE.

The Minister of the Treasury of Brazil has been authorized to issue 5 per cent bonds to the amount of 1,164 contos, to obtain funds for the purchase by the Government of the Rio das Flores and Uniao Valenciana Railways, which are to be incorporated with the Rio de Janeiro system.

### REORGANIZATION OF THE GEOLOGICAL AND MINERALOGICAL SERVICE.

The "Diario Official," of November 17, 1910, contains the text of the new regulations governing the Geological and Mineralogical Service, the reorganization of which was authorized by a presidential decree of November 9, 1910.

### NEW WIRELESS SYSTEM FOR BRAZIL.

The United Wireless Company of New York, according to the report of Vice-Consul-General SLECHTA at Rio de Janeiro, is placing its wireless system on all of the ships operated by the Lloyd Brazileire, the large subsidized line of Brazilian steamers. Stations at 6 strategic points on the coast have been erected in connection with this service, to be operated in conjunction with the national telegraph lines of Brazil, and permission has been obtained from the Government to set up stations at 20 more points along the coast. It is probable that within the next six months the United Wireless systems will be placed on Brazil's warships.

### SANTOS FOR THE YEAR 1909.

United States Consul JAY WHITE, of Santos, has recently submitted a comprehensive report of the commerce and industries of that port for the year 1909. During that year the exports from Santos to the United States amounted to $50,888,410, the entire amount being for coffee. The imports from the United States at that point were somewhat less than $4,000,000.

During that year there arrived through the port of Santos 38,238 immigrants, mainly Spanish, Italian, Portuguese, Turkish, and Russian. Of this number 25,516 came voluntarily.

One thousand five hundred and three vessels with an aggregate tonnage of 3,336,291 arrived at that port.

Toward the latter part of 1909 there were in operation 326 factories (not including the smaller ones) employing 24,186 hands. The most active and prosperous industry is that of the manufacture of cotton textiles.

### TRADE OPPORTUNITY IN SANTOS.

According to a communication from the consul at Santos, Mr. JAY WHITE, there is opportunity in his district for business in waist overalls, apron overalls, sack coats, cotton, jean, khaki, and corduroy trousers, work shirts, and children's play suits. These articles, however, should be suitable to a warm climate. At present this line of goods is imported from Germany and England. He states the best method of securing this business is to send representatives who are conversant with the Portuguese language, or if literature or correspondence is sent, this should also be in Portuguese.

### RAILWAY NOTES.

The Great Western of Brazil Railway Company has obtained permission from the Brazilian Government to extend the Southern Pernambuco Railway from station Garanhuns to Bom Conselho, a distance of 50 kilometers, and to operate the same.

Messrs. AMANDIO FIDENCIO LAMPERT and PEDRO A. GONÇALVES DE CARVALHO have obtained a concession from the Brazilian Government for the construction of 100 kilometers of railway in the Valley of the Cahy River, extending from the Port of S. Joao de Montenegro to the boundary of the district of Caxias, in the State of Rio Grande do Sul. The contractors will receive a subsidy of 15 contos for each kilometer of line built.

The Minas section of the Bahia-Minas Railway, extending from Aymore station to Theophilo Ottoni, and having a length of 233.87 kilometers, has been purchased by a group of capitalists, who are authorized to use the power of the waterfalls which are found within a distance of 8 kilometers of the line, for the future electrification of the road. By the terms of the contract, the new owners bind themselves to promote the settlement of the lands bordering the line. The section traversed by the railway is one of the richest in the State, especially in timber lands.

The definite surveys and estimates for the proposed extensions of the Baturite Railway and of the Victoria-Diamantina Railway have recently been approved. The extension of the Baturite Railway will have a length of 51,700 meters from Iguatu to Cedro, while the Victoria-Diamantina will extend for a length of 257.70 kilometers over the section between Itabira and Matto Dentro and the line to Santa Anna dos Ferros.

## CHANGE IN ROUTE OF BRANCH LINE OF THE MADEIRA-MAMORE RAILWAY.

A decree bearing date of November 8, 1910, authorizes a modification of the route of the Villa Murtinho-Villa Bella branch of the Madeira-Mamore Railway. According to the new route adopted, the line will start from a point in the vicinity of Pao Grande Falls, on the right bank of the Mamore River, and extend to Esperanqa Falls, on the left bank of the Beni.

## NEW RAILWAY CONTRACT.

The Department of Public Works of Brazil signed on October 6, 1910, a contract with Messrs. J. de Oliveira Fernandes and Humberto Saboya de Albuquerque for the construction of the section of the West of Minas Railway, between Henrique Galvao and kilometer 48 on the Goyaz Railway. By the terms of the contract, work must be begun within two months and the line completed within 18 months from the date of the contract.

## RAILWAY CONCESSION.

A decree of October 6, 1910, authorizes the Minister of Public Works to enter into a contract with J. de Oliveira Fernandes and Humberto Saboya de Albuquerque, for the construction of that section of the West of Minas Railway comprised between Henrique Galvao station and kilometer 45, on the Goyaz Railway.

## BRANCH LINE OF MADEIRA-MAMORÉ RAILWAY.

The "Marconigram" of October 29, published at Porto Velho, states that a proposal has been made by the Madeira-Mamoré Railway Company to the Bolivian Government for the construction of a branch railway 17 miles long and 1-meter gauge from the Madeira-Mamore line across the River Mamore, near the Cachuela Esperança. The proposal has been accepted, with some modifications.

This proposed branch, together with the main line of the Madeira-Mamoré Railway, will overcome the last barrier in the way of transportation for the immense territory drained by the Beni and Memore, with their larger navigable tributaries in Bolivia, to the west and south. It will also permit of cargoes being brought by boat from the frontier of Peru, on the north, down the Madre-de-Dios, to the Beni, thence to the terminal of the above-mentioned line at the head of the Cachuela Esperança. From here cargoes will be loaded on cars for transportation around the falls of the Mamore and Madeira rivers to Porto Velho, and here transferred direct to ocean-bound steamships for all parts of the world.

### INAUGURATION OF NEW SECTION OF MADEIRA-MAMORÉ RAILWAY.

On October 30 last a new section of the Madeira-Mamoré Railway, extending for 64 kilometers from the Jacy Parana to kilometer 152, was formally opened to traffic. A trip is now made daily over the operated section of the line from Porto Velho to kilometer 152 in about twelve hours. Rubber loaded on cars at the present terminus, at kilometer 152, in the morning can be transshipped from the cars to ocean steamers at Porto Velho on the evening of the same day, and thence carried direct, without further handling, to the United States or Europe.

### NEW SECTION OF THE WEST OF MINAS RAILWAY OPEN TO TRAFFIC.

On November 3 last a new section of the line connecting the West of Minas Railway with the port of Angra dos Reis, in the State of Rio de Janeiro, was opened to traffic. The new section extends from station Rio Claro to Alto da Serra.

### REPORT OF NORTHWESTERN RAILWAY COMPANY FOR 1909.

The board of directors of the Northwestern Railway Company presented to the stockholders of the company on October 20 last their report on the operations of the company during 1909. The report states that the work of construction was somewhat retarded both at the Sao Paulo and Corumba ends of the line, but, nevertheless, the rails have been laid to a distance of 475 kilometers from Bahuru, and work on the roadbed has proceeded as far as kilometer 575. At the Corumba end of the line the rails have been laid as far as kilometer 180, and the roadbed is about finished to kilometer 210. The section of this line in operation is giving satisfactory results, and the traffic is constantly increasing.

### MISCELLANEOUS NOTES.

The Irrigation Service of Brazil has engaged the services of Mr. G. A. Waring, a United States civil engineer, in connection with the great reservoirs which it proposes to build at various points in the north of Brazil. Mr. Waring is a graduate of Stanford University, and has had a wide experience in the construction of dams in the Western States. He was formerly connected with the Irrigation Service of the United States Geological Survey.

# CHILE

## BUSINESS CONDITIONS IN CHILE.

According to a report from American Consul ALFRED A. WINSLOW, Valparaiso, the business conditions in Chile have materially improved during the first nine months of 1910. During this period there has been an increase in the foreign commerce of the country of about 14 per cent.

Extensive public and private works have been progressing, and new improvements are being planned, principally the port works at Valparaiso and San Antonio. The money market is more stable, securities are much steadier, and there seems to be sufficient money at hand to carry out any legitimate undertaking.

Agricultural interests, too, have improved, while labor is employed at better wages than ever before; in fact, there is a shortage of workmen in many parts of the country.

The outlook for a prosperous year to come in Chile is, therefore, good.

## SILK MANUFACTURE IN CHILE.

A Chilean company is exhibiting in the Industrial Exposition at Valparaiso an installation, in operation, for weaving silks. This company has been running a plant in the suburbs of Valparaiso for three years with success and has found a ready market at home for its entire product, since the duty on manufactured silks varies from 5 per cent to 60 per cent, while raw silks enter free.

## FIRE INSURANCE IN CHILE.

United States Consul WINSLOW, at Valparaiso, reports that at the second quarter of 1910 the 16 foreign fire insurance companies were carrying insurance to the value of $90,012,545 (U. S. gold) in Chile, and the 22 Chilean fire insurance companies were carrying, on June 30, 1910, risks covering $76,314,344. These figures are a fair index of the general advancement of the country during the 21 months in question.

## RAILROAD CONCESSIONS.

United States Consul ALFRED A. WINSLOW advises that the Sociedad Ferrocarril de Aguas Blancas has been granted a concession to construct two feeders to their road for the distances of 43.3 and 34.1 miles. These feeders are expected to open up some rich mining country.

The Chilean Government has granted to Gibbs & Co., of Valparaiso, a concession to construct a private railway from Chucumata, a small town about 20 miles south of Iquique, to the rich nitrate fields of the interior.

## THE NITRATE INDUSTRY.

According to the last annual report of the Nitrate Propaganda Association of Chile, the production, exportation and consumption of this valuable fertilizer during the year of 1909–10, was as follows:

| Production. | Spanish quintals. |
|---|---|
| July 1, 1909, to June 30, 1910 | 51,756,951 |
| July 1, 1908, to June 30, 1909 | 39,489,525 |
| Increase in 1909–10 | 12,267,426 |
| EXPORTS. | |
| July 1, 1909, to June 30, 1910 | 50,622,972 |
| July 1, 1908, to June 30, 1909 | 40,213,232 |
| Increase in 1909–10 | 10,409,740 |
| CONSUMPTION. | |
| July 1, 1909, to June 30, 1910 | 51,798,158 |
| July 1, 1908, to June 30, 1909 | 41,709,209 |
| Increase in 1909–10 | 10,088,949 |

The increase in consumption during 1909–10 was approximately 24.2 per cent.

By countries, this increase in consumption is distributed as follows:

| | Spanish quintals. |
|---|---|
| Europe | 5,597,050=17.25 per cent. |
| United States (east) | 3,328,169=46.01 per cent. |
| United States (west) | 349,431=36.17 per cent. |
| Other countries (including Chile) | 814,299=76.62 per cent. |

## THE PRODUCTION OF COAL.

According to official statistics, the production of mineral coal in Chile during the years 1903 to 1909, and the first half of 1910, was as follows:

| Year. | Tons. | Year. | Tons. |
|---|---|---|---|
| 1903 | 827,112 | 1907 | 832,612 |
| 1904 | 751,628 | 1908 | 834,514 |
| 1905 | 793,927 | 1909 | 798,826 |
| 1906 | 932,488 | First half of 1910 | 406,000 |

Fifteen companies participated in the above production. Over 75 per cent of the total came from the Schwager Coal and Smelting Company, the Lota and Coronel Company, the Rios Curanilahue Coal Company, and the Arauco Company (Ltd).

## DISCOVERY OF A TUNGSTEN DEPOSIT.

Advices have just been received from Chile to the effect that a mining engineer, Señor F. A. SUNDT, has discovered in the Department of Vallenar a rich deposit of tungsten of calcium or scheelite, which heretofore existed in Chile in amounts so insignificant that it did not justify commercial exploitation.

## RAILWAY NOTES.

The new line connecting Chile with Coihueco was officially inaugurated on October 8, 1910.

The Supreme Government of Chile has authorized Mr. DAVID BATTLE, in behalf of the Aguas Blancas Railroad Company, to construct two branch lines: One from kilometer 62 on the main line to the nitrate beds of Remiendo No. 2; and the other from Oficina Valparaiso to Pampa Loreto.

Messrs. GIBBS & Co. have secured from the Chilean Government a concession for the construction and operation, during fifty years, of a railway from Caleta de Chucumata to Oficina Alianza, a distance of nearly 88 kilometers.

On October 2 last the railway from Melipilla to San Antonio was formally opened, in the presence of the Vice-President of the Republic and high Government officials.

The Trans-Andean Railway, connecting Valparaiso and Buenos Aires ascends the Andes 7,615 feet within a distance of 46 miles from Los Andes to the summit, or an average of about 166 feet to the mile.

## IRRIGATION WORKS.

The Chilean Government has under consideration the construction of an irrigation plant near Melipilla by means of a tunnel leading from the Maipo River, $1\frac{1}{4}$ miles in length, that will irrigate 26,548 acres of land.

## WATERWORKS.

The Chilean Government has completed plans for waterworks at Los Anjeles, La Calera, and San Carlos. Notices for bids for the installation of plants at these cities will soon be published by the Ministerio de Industria y Obras Publicas, Santiago, Chile.

## NEW STEAMSHIP SERVICE.

It is reported that the Royal Mail Steamship Company, which has just taken over the Pacific Steamship Navigation Company, will put on a line of steamers between Valparaiso and Panama that will connect with the Royal Mail Line from Colon to New York and thence to England. It is said here that the voyage from Valparaiso to Liverpool can be made via New York within twenty-three days.

## WOOL PRODUCTION.

United States Consul WINSLOW, of Valparaiso, reports that the output of wool has rapidly increased in Chile during the past five years. The exports for 1908 amounted to 27,745,080 pounds, of which the United States took about 8 per cent; England, 58 per cent; France, 28 per cent; and Germany, 6 per cent.

Of the total exports of wools for 1908 Punta Arenas supplied 21,100,244 pounds, of which one company (the Sociedad Esplotadora de Tierra del Fuego) furnished 7,221,634 pounds, clipped from 1,046,503 sheep. This company's holdings numbered 1,281,850 sheep on January 1, 1910, and the clip for 1909 amounted to 9,281,629 pounds.

The future seems very bright for this industry in the southern provinces of the country, since the climate seems to be what is needed for the production of fine wool.

## CONSULAR NOTES.

The deposits in the savings banks of Chile increased $542,764 (U. S. gold) during the five months ending September 30, 1910.

According to last census, taken in 1907, there are in Chile 24 cities exceeding 10,000 population, with a total of 924,041, out of a total population of 3,249,279 for the entire country.

There are 4,758 industrial establishments with an invested capital of $281,209,523 (U. S. gold), employing over 75,000 persons.

The Trans-Andean Railway connecting Valparaiso and Buenos Aires ascends the Andes 7,615 feet within a distance of 46 miles from Los Andes to the summit, or an average of about 166 feet to the mile.

The Chilean Government has just completed plans for waterworks at Los Anjeles, La Calera, and San Carlos.

The Chilean Government has taken active measures to prevent the introduction of cholera into the country, by having every avenue of entrance to Chile closely watched, and it is in shape to combat the disease should it break out within its borders.

The attendance at the Instituto Comercial, a government business and commercial school in Valparaiso, has reached 729. Evening classes are maintained, and the course includes classes in all the commercial languages of the country.

The 32 distilleries and 55 breweries in Chile pay the Government about $1,000,000 (United States gold) each year as revenue tax.

The Chilean exports for the first seven months of 1910 amounted to $55,966,135, against $51,754,913 for 1909. The gain was almost entirely in nitrate.

The government estimate for maintaining the public schools of Chile for the year 1911 amounts to $6,606,953, of which quite a large portion is to be expended for new buildings and equipment.

# COLOMBIA

## FREE EXPORTATION OF CATTLE AND RUBBER.

The Government of Colombia has recently decreed that exports of cattle and rubber shall be exempt from duty.

## SANITATION OF PORTS.

President Restrepo, of Colombia, issued on October 25, 1910, an important decree appropriating the sum of $30,000 for the establishment of sanitary stations and the purchase of apparatus and other equipment for sanitary protection to the maritime ports of the Republic.

## LAW REGULATING FOREIGN COMPANIES IN COLOMBIA.

Article 1. The companies that have their headquarters outside of this country that have or establish business or enterprises of a permanent character within the territory of this Republic will register, within the six months ensuing after the initiation of their business, at the notary of the circumscription nearest the place where their business is located the document of establishment and the statutes of the company. Anonymous companies (corporations) will also register at the same notary a copy of the state authorization.

Companies which are at the present time established in this country will be allowed one year in which to comply with this provision.

Art. 2. Such companies must have in Colombia, at the place where their business is located, a representative with as much power and discretion as the general manager of the company, in order to attend properly to all legal formalities.

The power of attorney of the representatives must be registered before the same notary referred to in article 1.

Art. 3. The documents referring to the organization of the company, in order to have effect in Colombia, must be secured with the required formalities at the place where they are given, and must have the certification of a consul of Colombia.

Art. 4. In addition to the extract of deeds and statutes of the anonymous companies that must be registered according to law 42 of 1898, the power of attorney must be registered at the tribunal of the place where the business is located, after having been previously certified by the notary.

The extracts of deeds, and statutes, after being registered by the tribunal, must be published for three times in the official paper of the department.

ART. 5. No contract will have value, unless the formalities prescribed in this decree have been complied with.

ART. 6. The Executive Power shall declare whether or not the formalities prescribed in this decree have been properly fulfilled by the companies.

ART. 7. The books mentioned in the first three paragraphs of the twenty-seventh article of the Code of Commerce, must be signed, at the places where there are Chambers of Commerce, on each one of the pages, by the secretary of said Chamber, who shall state the number of pages signed and the name of the person or company to whom the books belong.

ART. 8. The district civil judges and their secretaries will be entitled to one half a cent on each page signed, this amount being equally divided between the two.

In the Chambers of Commerce the right to the one-half cent per page belongs to the secretary.

ART. 9. The signing of the books before the present decree, by the secretaries of the Chamber of Commerce will be valued for all the legal effects.

ART. 10. The present decree will take effect thirty days after its publication in the "Diario Oficial."

# COSTA RICA

## TAX ON PASSENGERS.

The Congress of the Republic of Costa Rica has established a tax of 5 colones (about $2.50 gold) on each cabin passenger (first and second class) and of 3 colones ($1.50 gold) on all others.

The receipts from this new tax will be used exclusively for the enlargement and improvement of the Limon custom-house and other official buildings.

The same law authorizes the President of the Republic to raise a loan, to be guaranteed by the revenue from the tax above referred to, amounting to 150,000 colones ($75,000 gold), with interest at 12 per cent per annum.

### REDUCTION OF CUSTOMS DUTIES.

In order to encourage the agricultural development of Talamanca, the President of the Republic of Costa Rica has decreed a reduction of 25 per cent on the customs duties of all articles of merchandise imported through Bocas del Toro for consumption in Talamanca.

### LOAN FOR AN ELECTRIC PLANT.

The Congress of Costa Rica has authorized the municipality of the Central Canton, Heredia Province, to raise a loan not exceeding 100,000 colones (about $50,000) in bonds of 100 colones each, for the construction of an electric light and power station. The bonds will bear interest of 1 per cent per month and will be sold at par. They will be authorized by the signature of the Secretary of Finance and the Auditor of the Republic.

### NEW COLONY AT EL SALVADOR.

The Constitutional Congress of Costa Rica has issued a decree providing for the establishment of a colony of 100 Costa Rican families in the plains of Santa Clara, to be known as the "Colony of El Salvador," and to constitute the Eighth District of the Central Canton of Heredia Province. The Government will pay the moving expenses of the families and will furnish them with agricultural implements, 6 yoke of oxen, 10 cows, 1 bull, 1 sugar mill, 1 saw-mill, and such other machinery and materials as the Executive may deem necessary.

The Government will grant to each head of the family and to each male inhabitant a parcel of 24 hectares for cultivation and a lot of 17 ares for building purposes within the town lot. Each head of the family will receive a pension of 15 colones per month for ten months from the day on which he starts the cultivation of his land.

### UTILIZATION OF PUBLIC WATERS.

A law of the Costa Rican Congress, approved October 31 last, declares that the power that may be generated from the waters of the public domain within the territory of the Republic is inalienable and belongs to the State. The concession and rights for the utilization of such power may be obtained only upon certain conditions and for a limited period. The Executive alone is empowered to grant such concession.

# CUBA

## THE BUDGET FOR 1911-12.

The President of the Republic of Cuba recently submitted to Congress his message on the general budget bill for the fiscal year 1911–12.

The estimate of probable revenues for 1911–12 reaches the sum of $34,024,582.32, distributed as follows:

| | |
|---|---|
| Customs receipts | $24,383,303.28 |
| Consular fees | 320,000.00 |
| Postal and telegraph revenues | 800,000.00 |
| Internal revenues | 800,000.00 |
| Receipts from Government real estate | 326,342.47 |
| Miscellaneous receipts | 842,455.18 |
| National lottery | 3,000,000.00 |
| Special revenue from the loan | 3,552,481.39 |
| Total revenues | 34,024,582.32 |

The appropriation for general expenses, submitted to Congress amounts to $34,024,582.32, which is $2,255,097.68 less than the appropriation for the present fiscal year. The total for 1911–12 is distributed as follows:

| | |
|---|---|
| Fixed appropriation, 1911–12 | $7,323,066.72 |
| Annual appropriation, 1911–12 | 25,844,013.30 |
| Additional appropriation, 1911–12 | 857,502.30 |
| Total | 34,024,582.32 |

## CONSTRUCTION OF WAR SHIPS.

The President of Cuba has awarded to W. Cramp & Son, of Philadelphia, the contract for the construction of a 2,055-ton cruiser, with a speed of 18 miles, and a school-ship cruiser of 1,200 tons, 16 miles speed. Samuel White & Co., of East Sowes, England, has been awarded the contract for the construction of two gunboats of 208 tons each and a 12-mile speed.

## THE ACADEMY OF ARTS AND LETTERS.

The President of Cuba has recently issued a decree establishing the National Academy of Arts and Letters, as an independent corporation annexed to the Department of Public Instruction and Fine Arts of the Republic. The objects of the academy will be to promote the study of literature, music, painting, sculpture, and architecture by stimulating an artistic taste. The institution is to be composed of 65 resident academicians at Havana, 24 academicians from the Provinces, and an unlimited number of honorary members abroad.

For the management and representation of the academy, there will be a director, a secretary-general, a librarian and custodian, and a treasurer, to be elected from among the resident members.

### RELIEF FUND FOR PINAR DEL RIO.

In view of the damage caused by the recent cyclone in the Province of Pinar Del Rio, Cuba, and the urgent need of every possible help for the reconstruction of its productive agencies in order to prevent diminution of its principal resources, the President of the Republic of Cuba has appropriated the sum of $125,000 for the relief of this Province. This amount will be distributed in money and in agricultural and farming implements.

### TARIFF CHANGE ON IRON WIRE.

Information is received from JOHN B. JACKSON, the United States consul at Habana, Cuba, that in accordance with a recent Treasury decision, iron wire (tariff No. 41, "a," "b," and "c,") will hereafter be exempted from the 30 per cent surtax placed upon it by Executive Decree No. 44, of February 1, 1904, when imported directly for use by a manufacturer in his own manufactures.

## DOMINICAN REPUBLIC

### TELEPHONE SYSTEM IN SANTIAGO.

The Supreme Government of the Dominican Republic has authorized Messrs. MIGUEL HENRIQUEZ and PABLO ARNAUD, Dominican citizens, to establish and operate a telephone system in the city of Santiago de los Caballeros.

### LOTTERIES IN THE DOMINICAN REPUBLIC.

Lotteries are operated in all important towns and cities in the Dominican Republic, according to advices from the American Consul, PHILIP E. HOLLAND. In many of the larger cities there are from two to five, but practically all are under municipal supervision.

The State laws require that 70 per cent of the total receipts from the sale of tickets be distributed in premiums, 5 per cent turned over to the local city council for street improvements, and the balance, after deducting operating expenses, be apportioned to the public hospitals, schools, fire departments, and charities. The revenue from lotteries serves in lieu of municipal property taxes.

The drawings are held biweekly, publicly, and take place Sunday morning in the quarters of the police department. They are usually attended with festivities, large crowds are present, and local bands furnish music.

### SOAP INDUSTRY IN THE REPUBLIC.

The manufacture of soap has become one of the leading industries in the Dominican Republic. Two factories, one in Puerto Plata and one in Samana, have been in operation for about fifty years. In 1909, the output of the local factories amounted to 1,250,000 pounds (wholesale value $300,000). This includes common laundry soap and many varieties of scented and unscented toilet soaps. The entire product is consumed in the Republic. Each factory pays an annual license of $365.

## ECUADOR

### LOAN FOR GUAYAQUIL.

The Congress of Ecuador has authorized the municipality of Guayaquil to arrange for a loan or loans not exceeding 6,000,000 *sucres* (about $3,000,000 gold), to be used for paying off debts due to national banks, as compensation for lands ceded for the purpose of widening streets, for the construction of a municipal building, a market, a crematory, and for paving the streets of the city. The loan is to bear 5 per cent interest and 1 per cent amortization. It is to be guaranteed by the revenues from certain taxes set aside for this purpose.

### CANALIZATION OF GUAYAQUIL.

The Congress of the Republic of Ecuador has passed a law authorizing the Executive to negotiate a loan not exceeding 13,000,000 *francs*, the receipts of which are to be exclusively devoted to the canalization of the city of Guayaquil. The rate of interest must not exceed 6 per cent and the amortization 1 per cent.

### INFORMATION BUREAU IN GUAYAQUIL.

It is reported that the Government of Ecuador has established an information bureau in Guayaquil where data of every nature concerning the country may be had on application.

# GUATEMALA

## THE PAN AMERICAN RAILROAD.

On November 21, 1910, the birthday of President MANUEL ESTRADA CABRERA, the works of the Guatemalan section of the Pan American Railroad were formally inaugurated. The ceremony was presided over by the Minister of the Interior, acting in the name of President ESTRADA. He began the construction by driving a silver spike into the first tie. The American Minister, Mr. REYNOLDS HITT, was also present and delivered an interesting address on the occasion.

The construction of this section, about 60 kilometers long, is in charge of the Guatemala Central Railway, and its completion is expected within eighteen months.

## RATIFICATION OF CONVENTIONS.

"El Guatemalteco," the official organ of the Republic of Guatemala, publishes in its issues for November the texts of the following international conventions, recently ratified by the Supreme Government.

Convention for the approval of plans, estimates, and manner of payment of construction and equipment of the Central American Pedagogic Institute.

Convention for the unification of Central American currency.

Convention for the unification of weights and measures in Central America.

Convention prescribing the duties of the International Central American Bureau.

Convention regarding the Central American consular service.

Convention between Guatemala and Chile for the exchange of official correspondence and scientific literary, and industrial publications.

## TRANSLATION OF COMMERCIAL TREATY BETWEEN CENTRAL AMERICAN REPUBLICS.

The Governments of the Republics of Guatemala, Salvador, Nicaragua, Honduras, and Costa Rica, with the object of cultivating the commerce between the countries of Central America and because one of the contracting countries can not for special reasons enact a declaration for free trade, have appointed delegates:

Guatemala, Señor Don MANUEL MARÍA GIRÓN.

Salvador, Señor Dr. Don SALVADOR RODRÍGUEZ G.

Nicaragua, Señor Don MANUEL PÉREZ ALONZO.

Costa Rica, Señor Don ROBERTO BRENES MESÉN.

ARTICLE 1. From and after the 1st of January, 1911, importations from any of the contracting Republics shall enjoy a reduction in the customs duties of the respective countries of 20 per cent on products of original manufacture and 10 per cent on products manufactured from imported *materia prima* (material having received the first treatment or process of manufacture).

ART. 2. When on account of prior treaties made with a Central American State, a nation shall be in the enjoyment of certain customs privileges, the reduction of 20 per cent heretofore mentioned shall be effective following and in continuation of the privilege already conceded.

ART. 3. There shall not be included in this convention articles the entry of which have been or may be hereafter prohibited, nor those to which obligations attach by reason of special legislation by the respective contracting countries.

# HAITI

### NEW NATIONAL THEATER FOR PORT AU PRINCE.

Port au Prince, the capital of the Haitian Republic, is soon to have a new national theater worth $100,000, the Government having already approved of the contract awarded for its construction. By the terms of the contract, Messrs. OCCIDE JEANTY and JUSTIN ELIE, the concessionaires, are to construct the theater and manage it for a period of fifteen years. At the expiration of that time, the theater reverts to the State. The theater must be completed within two years after construction work is started. A monthly subsidy of $500 American gold is allowed the concessionaires during the first ten years of the contract, and in return 5 per cent of the net proceeds of the theater shall be given to charity and 14 per cent to the State.

Every year at least 30 dramatic and musical performances must be presented by a company of singers or actors brought from abroad at the expense of the concessionaires. Six free public performances must also be given every year.

A box shall always be reserved for the President of the Republic.

### PARCELS POST CONVENTION WITH THE UNITED STATES.

At the closing of its special session on October 27, Congress passed a bill authorizing a special issue of postage stamps to be placed in circulation on and after December 30, 1910, for use on parcels leav-

ing for or arriving from the United States. This issue is ordered by virtue of the Parcels Post Convention between the United States and the Haitian Republic and approved by a law of last October.

### WITHDRAWAL OF PAPER MONEY—DEMONETIZATION OF NICKEL—REFUNDING OF THE INTERNAL DEBT.

At the same session of Congress two important bills were passed relating to the withdrawal of paper money, the demonetization of nickel, and the refunding of the internal debt, all of which have been approved by President SIMON.

The bill relative to the withdrawal of paper money and the demonetization of nickel currency provides that as soon as the 5 per cent gold loan of the Haitian Republic becomes effective, the Government shall take necessary measures for the withdrawal of the paper money and the demonetization of the nickel currency. The rate of exchange shall be fixed by a presidential decree as well as the conditions governing the withdrawal and the demonetization.

The other bill relating to the refunding of the internal debt stipulates that as soon as the 5 per cent gold loan becomes effective the Government shall be authorized to take all necessary measures for the redemption of the internal debt under the conditions indicated herewith:

The 6 per cent consolidated debt will be redeemed at 55 per cent; the 3 per cent consolidated debt will be redeemed at 27 per cent; the 6 per cent loans, known as provisional, will be redeemed at 54 per cent; loans of January 10, 1903, will be redeemed at 54 per cent; blue certificates will be redeemed at 25 per cent; pink certificates will be redeemed at 25 per cent. The certificates delivered for the settlement of diplomatic claims by virtue of the arbitral awards will be settled by agreement of the beneficiaries and the Department of Finance. The balance of the loan of August 20, 1909, will also be redeemed by agreement with the Department of Finance.

As soon as the 5 per cent loan becomes effective, the National Bank of the Republic of Haiti will deduct from the $12,000 fund which guarantees the reimbursement of bank notes of 5 gourdes, a monthly sum of $10,000. This shall be applied to the settlement of the claims against the internal debt which have not been liquidated and for which certificates were to have been issued.

The commissions intrusted with the verifying of these claims must submit their reports as soon as possible. The Secretary of State of Finances, upon the authorization of the Cabinet, will decide upon the manner of settlement of these claims.

### CONCESSION FOR THE ESTABLISHMENT OF FLOUR MILLS.

Mr. MICHEL SYLVAIN has been awarded a concession by the Haitian Government, under date of October 22, 1910, for the establishment of one or several mills in the Departments of the North, West, and Artibonite for the manufacture of wheat and banana flour.

According to the terms of the concession, which runs for twenty years, the concessionnaire will pay to the State for each bag of wheat of 250 pounds received from abroad a single net duty of 20 cents American gold.

The Government will furnish a site on the coast for the establishment of the mills. All the material, machinery, as well as the fuel imported during the life of the concession, will enter free of all customs and port duties.

The concessionnaire is authorized to organize a stock company under the laws regulating such enterprises, but he can not cede his rights to a foreigner or to a foreign company except by the consent of the Government.

The concessionnaire also agrees to undertake the cultivation of wheat in the regions suitable for this culture. A period of three years is allowed the concessionnaire for the establishment of his first mill, but a further lapse of time renders the contract null and void.

Mr. SYLVAIN hopes to find the necessary capital in the United States for the establishment of these mills.

### APPROPRIATION OF 125,000 GOURDES FOR THE VICTIMS OF THE EXPLOSION ON BOARD "LA LIBERTÉ."

President SIMON recently signed the bill providing for an appropriation of 125,000 gourdes to be distributed among the survivors of the explosion which occurred on board the Haitian gunboat *La Liberté*, on October 24, and the parents of the victims. The Secretary of Finances is authorized to devise means for realizing this sum with the least possible delay in order to make the distribution.

## HONDURAS

### NEW STEAMSHIP LINE.

A new steamship line has been inaugurated, running from Jacksonville, Florida, to Honduras, with stops at Key West, Florida, and Havana, Cuba. The steamers will be among the largest to visit those ports and will accommodate between three and four hundred passengers.

The new line is to be known as the Honduras Fruit and Transportation Company, with its main office in Jacksonville. The sailings will be weekly.

### INDUSTRIAL ENCOURAGEMENT.

The United States Consul at Tegucigalpa reports that the Government of Honduras is taking a great interest in developing the country's industries. For some time the cultivation of tobacco has been encourged in various ways, the introduction of modern agricultural methods has been urged, and the Government is planning to import cattle and horses, which will be kept on a farm near the capital for breeding purposes for the benefit of cattle raisers.

To encourage industrial activity, the Government has appointed a man to teach the prisoners at Gracias the art of making the famous straw hats of Honduras, also called "Panama" hats. Until now this industry was restricted to the city of Santa Barbara. The prisoners at Gracias are now given an opportunity to learn a trade which should be useful to them after they have served their term, and this work of teaching criminals will be taken up in other parts of the country. The "junco" palm, from the leaves of which the hats are made, has been planted near the capital to see if it can be successfully grown in this Department.

### WATERWORKS CONCESSION AT PUERTO CORTES.

By decree of the President, the concession for waterworks to supply the city, originally granted for a period of 33 years, has been extended to a maximum of 50 years. This was done at the request of the concessionaire, who now proposes to improve the public service and increase the effective pressure for more efficient fire protection.

### TRADE OPPORTUNITIES IN HONDURAS.

Advices from CLAUDE I. DAWSON, the United States Consul at Puerto Cortes, indicate a market in Honduras for acetylene-gas plants. Kerosene oil is at present the chief method of artificial lighting, but the rather high price of this article renders favorable a cheaper method. Several small acetylene-gas plants are successfully operating now, but there is ample field for depots throughout the large cities, as well as the numerous small towns and outlying settlements.

Another report states that an opportunity is offered to anyone well acquainted with the truck-gardening business. The land at any point along the railroad beyond the coast land is extremely fertile and well adapted for such an enterprise, and the market is ever receptive. It would be well, however, for the persons to visit this district and satisfy themselves that they can become adapted to the country and its people.

### 1910 CENSUS IN THE REPUBLIC OF HONDURAS.

A census of the Republic of Honduras was taken on December 18, 1910. According to the regulations of the National Bureau of Statistics of Honduras, the census must be taken every five years, counting from 1901. The last one was taken in 1905.

## MEXICO

### COINAGE OF MONEY.

According to statistics published by the Department of Finance and Public Credit of Mexico, the coinage of money during the fiscal year ended June 30, 1910, amounted to 8,105,560 pesos, as follows:

| | |
|---|---|
| Gold coins | ₱5,010,000 |
| Silver coins | 2,884,000 |
| Nickel coins | 206,060 |
| Copper coins | 5,500 |

The coinage of gold and silver during the last ten fiscal years was as follows:

| Year. | Gold. | Silver. | Year. | Gold. | Silver. |
|---|---|---|---|---|---|
| 1899–1900 | $598,086.00 | $18,102,630.00 | 1904–5 | $818,988.00 | $15,501,365.00 |
| 1900–1901 | 544,279.00 | 18,290,390.00 | 1905–6 | 41,776,500.00 | 5,079,000.00 |
| 1901–2 | 791,382.00 | 24,509,850.00 | 1906–7 | 23,250,000.00 | 23,367,923.80 |
| 1902–3 | 713,146.00 | 26,438,350.00 | 1907–8 | 16,600,000.00 | 7,403,619.50 |
| 1903–4 | 921,545.00 | 22,025,450.00 | 1908–9 | 1,760,000.00 | 6,528,000.00 |

The following table shows the coinage of nickel and copper coins and the total coinage during the same periods:

| Year. | Nickel and copper. | Total coinage. | Year. | Nickel and copper. | Total coinage. |
|---|---|---|---|---|---|
| 1899–1900 | $23,010.00 | $18,723,726.00 | 1904–5 | $108,305.00 | $16,428,658.00 |
| 1901–1 | 28,040.00 | 18,862,709.00 | 1905–6 | 417,100.00 | 47,272,600.00 |
| 1901–2 | 14,100.00 | 25,315,332.00 | 1906–7 | 1,317,746.90 | 47,935,670.70 |
| 1902–3 | 49,038.00 | 27,200,534.00 | 1907–8 | ..... | 24,003,619.50 |
| 1903–4 | 93,524.00 | 23,040,519.00 | 1908–9 | 202,580.00 | 8,390,580.00 |

### COST OF PUBLIC LANDS IN MEXICO.

The Pan American Union has recently received a communication from Mr. Felix Bezaury, jr., of the City of Mexico, in which he states that the sale of public lands in Mexico has been suspended in accordance with a decree issued by Congress, dated December 18, 1909. The Supreme Government may, however, lease lands at a price

which shall annually represent at least 5 per cent of the value of these lands. The lessees must furnish a perfectly accurate plan or sketch of such lands as they desire to obtain, and they shall have an option on the purchase of the land should the Government decide to sell it. The land must, however, be duly surveyed by the engineer of the Land Office Commission. The land sold to any person shall not exceed 5,000 hectares. A lease shall be in force for a period of ten years or less.

The prices of the lands in some of the Northern States of the Republic are as follows:

| | Per hectare. |
|---|---|
| Chihuahua | $6.00 |
| Choahuila | 6.00 |
| Sinaloa | 6.00 |
| Sonora | 6.00 |
| Tamaulipas | 6.00 |
| Nueva Leon | 6.00 |
| Tepic | 6.00 |
| Baja California | 3.00 |

In other States the prices vary as follows:

| | Per hectare. |
|---|---|
| Campeche | $6.00 |
| Chiapas | 6.00 |
| Durango | 6.00 |
| San Luis Potosi | 6.00 |
| Yucatan | 6.00 |
| Zacatecas | 6.00 |
| Guerrero | 7.50 |
| Hidalgo | 7.50 |
| Oaxaca | 7.50 |
| Veracruz | 18.00 |
| Michoacan | 21.00 |
| Mexico | 32.00 |
| Morelos (approximately) | 40.00 |

## EXTENSIVE IRRIGATION SCHEME.

At the initiative of Señor OLEGARIO MOLINA, Secretary of Promotion of Mexico, and supported by Engineer MANUEL VERA, in charge of the Bureau of Waters of this Department, a plan has been completed for the organization of a Federal service of irrigation throughout the Republic. The Government is about to invest large sums of money in building great reservoirs for retaining the waters now going to waste. The Secretary realizes that many of the farmers who possess large tracts of land are not in a position to develop them, and he is furthermore convinced that the only way in which agriculture can be placed on a par with mining is to extend to it the help of the Government by large appropriations for irrigation projects.

For the proper prosecution of Secretary MOLINA's scheme to improve the agricultural conditions, the country will be divided into

ten zones, preference being given to such districts as promise the greatest success and the best returns.

It is believed that at least 10,000,000 of hectares of land can be reclaimed and made among the most productive in the Republic. The report made to the Department of Promotion by a commission appointed to investigate the matter, indicates that the amount of irrigated land would increase the annual agricultural production of the country by $300,000,000 and in addition to this increase of agricultural resources, irrigation would make the crops of these regions practically certain each year.

The proposed ten zones, as shown in the accompanying map, are as follows:




Map showing the proposed ten zones into which the country will be divided for the proper prosecution of the vast irrigation scheme.

First. To include the basins of the Altar, Hermosillo, Sonora, Yaqui, Mayo, and Fuerte Rivers.

Second. The basins of the Sinaloa, Culiacan, San Lorenzo, Elota, Plaxtla, Mazatlan, and San Pedro Rivers.

Third. The Rivers Santiago, from the Chapala Lagoon as far as their mouth on the sea, together with their tributaries, the Bolaños,

Cuixtla, Juchipila, and Verde Rivers, and also the Ameca, Armería and Tuxpan or Coahuayana Rivers.

Fourth. Part of the basin of Las Balsas River from the town of Mexcala, State of Guerrero, as far as its mouth in the Zacatula bar on the Pacific Ocean, and the basins of its tributaries Tepalcatepec, Marquez or Cupatitzis, and Cutzamala.

Fifth. The rest of the Las Balsas Basin, from the town of Mexcala, State of Guerrero northward, and the basins of the Amates, Tomatal, Tepecoacuilco, Amacuzac, Matamoros, and Atoyac Rivers, and all the streams in the State of Flaxcala, which form part of Las Balsas Basin. This zone will also include the basins of the Valleys of Apam and San Juan de los Llanos.

Sixth. The Blanco, Amapa, Antijua, Actopan, Nautla, Tecolutla, Cazones, and Tuxpan.

Seventh. The basin of the Panuco River, whose first tributary is the Chicayan, and is divided into the Tamuin and Moctezuma Rivers; the Catter receives the Tempoal, which is in turn divided into the Hiles and Calabozo Rivers; farther up it receives the Amajaque and San Juan del Rio Rivers, and then continues under the names of Tula and Tepali. The Tarnuin River is divided into the Tampaon and Santa Maria, the latter receiving the Gallinas and Tamasopo together, and the Rio Verde, and continues with the name of Santa Maria upward.

Eighth. The Tamesin, Purificacion, San Fernando, San Juna Rivers, and portion of the Rio Grande as far as its confluence with San Juan River.

Ninth. The Alamos, Salado, Conchos Rivers and the Rio Grande from its confluence with the San Juan.

Tenth. The basin of the Lerma River from its source to the Chapala Lagoon, with its tributaries the Laja, Turbio, and Angulo Rivers and the Casino of the Rivers La Pasion, Duero, and Zula.

It should be noticed that the Tlahualido District, where there is already an irrigation system, the Valley of Mexico, El Salado, and States of Tabasco, Campeche, and Yucatan are not included in the present scheme. On account of the conditions peculiar to these regions different projects will have to be adopted.

## THE LARGEST RUBBER PLANTATION.

The "Economista Mexicano," one of the most influential financial publications of the Republic, is responsible for the statement that the Zacualpa Rubber Plantation is one of the largest, if not the largest, in the world.

The estate referred to has 10,000,000 rubber trees, including the various annexes located in the Soconusco District, State of Chiapas, a distance from one end to the other of 23 miles.

The hacienda in question is in itself a small town, with electric-light service, schools, and other public utilities. The Pan-American Railroad crosses the entire length of the plantation.

### FOREIGN COMMERCE IN 1909-10.

According to figures published in the "Bulletin of the Department of Finance of Mexico," the foreign trade of the Republic in 1909–10 amounted to 454,912,051.15 pesos, of which 194,865,781.37 pesos were for imports, and 260,046,269.78 pesos for exports, or a balance of 65,180,488.41 in favor of the latter.

The importation in 1908 amounted to 156,533,026.97 pesos, and the exportation to 231,100,618.52 pesos, the balance of trade being 74,567,591.55 pesos.

### MERGER OF PAN AMERICAN RAILWAY.

Consul ALBERT W. BRICKWOOD, jr., at Chiapas, reports that the Pan American Railway has passed under the operative control of the National Railways of Mexico, at the same time that the Veracruz to the Pacific Railways also came under their control. This gives the National lines a continuous service from border to border, with but a single hiatus in the center of the Republic.

### TAMPICO NOTES.

The American consul at Tampico, CLARENCE A. MILLER, writes that engineers are still busy surveying for the two lines of railroad essential for the development of this section. Preliminary work has already begun for the direct line from Tampico to Mexico City, and work will soon commence on the Matamoros-Tampico line.

The transportation companies running between Tampico and New York have recently started a movement to organize the small shippers, particularly of fruit and garden produce, in order that the production of this section can be handled to better advantage.

An American has discovered a method of extracting fiber from the banana plants of this section. A company is being organized for the development of this fiber, which, it is believed, will replace to some extent the use of cotton waste.

### NEW BANK IN SONORA.

By virtue of a contract dated November 4 last the Government of Mexico has authorized Messrs. LUIS A. MARTINEZ, ADOLFO BLEY, and MAX MÜLLER to establish a mortgage and agricultural bank in the city of Hermosillo, Sonora, under the name of "Banco Hipotecario y Agrícola del Pacifico," with 2,000,000 pesos capital.

### GUANO CONCESSION.

The Government of Mexico has recently granted a Californian corporation a ten-year concession for the exploitation of guano in 17 islands off the Campeche coast. The company is capitalized at $150,000 and will pay the Government 75 cents Mexican ($0.37 gold) for each ton of guano extracted, the value of which is estimated at 30 pesos ($15 gold).

### IRRIGATION IN THE YAQUI REGION.

A commission of engineers has been appointed by the Department of Promotion of the Mexican Republic to visit the State of Sonora for the purpose of carefully studying the basin of the Yaqui River, in order to properly organize an irrigation scheme in that fruitful region. Considerable areas of land are at the present time irrigated on the banks of the river, and large quantities of cereals, tobacco, and fruit are cultivated to good advantage.

There are several projects to increase by means of proper irrigation the lands cultivated, and it is estimated that the crops raised there under favorable conditions would represent a value of about $40,000,000 every year.

### AGRICULTURAL SCHOOL IN YUCATAN.

An agricultural school is soon to be established in the State of Yucatan. This step is in accordance with the movement for the founding of these schools throughout the Republic, so that the vast area of vacant land in Mexico may be made more productive.

The Department of Promotion is acting conjointly with the Governor of Yucatan in this matter, and in connection with the agricultural school there will be a department for instruction in the various crafts. The entire institution will be known as the Lorenzo Ancona Castillo School, and will be in charge of a president to be selected annually.

The ground for the building has been selected, some of the plans of the buildings prepared, and work being done on further sections of the proposition. Actual building will be begun as soon as possible and rushed to completion, as it is planned to have the school in operation by next winter.

### POWER PLANT AT TOLUCA.

It is announced that a group of New York capitalists has secured concessions for the building of a dam near Toluca, State of Mexico, and the installation of a hydroelectric plant to generate at first 35,000 horsepower and to be so constructed that the capacity may be increased to 75,000 horsepower if necessary.

Investigations that have been carried on for some months have convinced the promoters that they will be able to develop 75,000 horsepower at a cost of only $4,000,000 gold.

Subordinate to the main power project, and in order to provide a market for the utilization of the power to be generated, the Toluca Power Company may build two electric railways from Mexico City, one to Pachuca and the other to Cuernavaca.

### NEW RUBBER PLANT.

According to dispatches received from Mexico, the plant known as "Spanish Carnation" (Clavel de España), which grows so abundantly in the District of Rosario, in a large section of the State of Sinaloa, and the Mountains of Matatan, is now being carefully studied. It is found that the milky juice of this plant produces rubber of good quality. The results so far obtained are satisfactory and promise a success equal to that of the guayule plant.

### REORGANIZATION OF THE CONSULAR SERVICE.

"The Diario Oficial" of Mexico publishes the text of a law reorganizing the consular service of the Republic.

By this law the Mexican consular service is to consist of consuls-general, consuls, vice-consuls, and chancellors of two grades: Regular (de carrière) and honorary. Regular consular officers are to have a fixed salary, prescribed by this law; the honorary agents will receive a compensation equal to 2,400 pesos ($1,200 gold) from the fees collected by him during the year.

To become a regular consular officer one must be a Mexican citizen and be able to furnish a certificate of candidacy to the consular service issued by the National School of Commerce and Administration or pass an examination in the subjects pursued in that school.

There are to be two inspectors of consuls with the rank of consul-general of the first class.

### ANOTHER RAILWAY IN LOWER CALIFORNIA.

The Mexican Government has granted Mr. John D. Spreckles a concession for the construction and operation of a railroad line in Lower California. The line will start at a point near Monument No. 255 of the boundary line between Mexico and the United States, continue eastward parallel to the same boundary to a distance of not less than 50 meters, and terminate at 1,181 meters east of Monument No. 242 of that line.

### RAILROAD CONCESSION.

By contract of December 3, 1910, the Southern Pacific Railroad Company of Mexico is authorized to construct and operate a line starting from a point between Orendain and Guadalajara, or from the

latter city, pass through Zamora and Morelia and terminate at the City of Mexico. The company will commence the survey of the line within one year; 50 kilometers of the line must be completed within two years, and an equal number every year thereafter, so that the whole line will be completed by November 6, 1917.

This contract also includes all the concessions previously granted to the Southern Pacific Railroad Company, and to the Cananea, Rio Yaqui and Pacific Railroad Company, which have been transferred to the former company.

## RARE VARIETY OF ONYX.

The "Mexican Daily Record" reports that onyx in the form of a true aragorite, varying in colors from a rich chocolate to a high amber, has been recently discovered in immense deposits on the mountain side of El Talan, at Etla, 12 miles from the city of Oaxaca. Experts declare that never before has an onyx or a marble of these particular hues been discovered anywhere.

Mr. INGLE CARPENTER, of Hollywood, California, the secretary and treasurer of the company controlling the Etla quarries, says:

I predict that Mexico, through the discoveries made this month near Oaxaca City, will jump into fame as the onyx producer of the world, since her product must appeal to the greatest decorators as meeting the tastes of numerous builders to whom the brighter colors appear too garish.

It is reasonable to assume that since this entirely unique color of marble has been found in one section of Oaxaca it may be discovered in other beds of that same or other districts of the State, and that the supply should accordingly be equal to exhorbitant demands. The industry in Oaxaca is only in its infancy, and yet there is no other section on this hemisphere which can rival it.

## IMPROVEMENTS IN DURANGO.

To celebrate the centenary of Mexico, almost every State capital, district, and municipality in the Republic, inaugurated one or more public works in some way or other of benefit to the community. The State of Durango, according to official information received at the Department of the Interior, inaugurated more public works than did most other States.

Among some of the more notable works installed were the following: In the municipality of San Dimas, public laundries and bath houses; the larger part of the public road which connects that town with San Ignacio in the neighboring State of Sinaloa, and part of the building for public offices; in Carboneras, a building for public school; in Tayoltita, a public square named "Independencia;" the city's water supply and electric-light service; in Gavilanes, another building for public school named "Vicent Guerrero;" in Sapioria another school named "Morelos;" in Huahuapan, another school, a

cemetery and reforms in the town jail; in Villa Corona, part of the construction of two buildings for schools of both sexes, and the enlargement of the municipal palace; in Palmarito, Vantana, and Huizar, public schools named "Allende," "Abasolo," and "Nicolas Bravo," respectively.

## NICARAGUA

### PROPOSED RAILROAD.

Information has been received that the United Fruit Company proposes to enter into an arrangement with the Government of Nicaragua for the construction of an important railroad on the Atlantic coast. This line will undoubtedly be a great factor in the progress and development of that country.

### TELEGRAPH SCHOOLS.

The Government of Nicaragua has provided for the establishment of two schools of telegraphy, one at Managua and the other at Granada. There will be in each school a director, who will also be professor of telegraphy, and 20 students. The latter will be supported by the Government and receive a monthly pension of 35 pesos (about $13 gold) each.

### NEW WIRELESS STATIONS.

The Government of Nicaragua will soon establish several wireless stations, in addition to the one already operating at Bluefields.

The mining companies of Pis-Pis will also install a station, at their own expense, in the mines. The wireless stations which are to be operated by the Government will be located at Cape Gracias a Dios, Prinzapolka, Rio Grande, Rama, Acayapa, and El Chile.

## PANAMA

### IMPORTANT SUGAR CONCESSION.

The National Assembly of Panama has approved the contract between the Government and Mr. Frederico Barrera, by the terms of which the latter agrees to establish in the Province of Cocle a sugar mill or factory, with all the machinery, draft animals, and other equipment necessary for a plant capable of working, during each crop, the total yield of sugar cane from a plantation of 250 hectares.

The concessionaire agrees to cultivate sugar cane in 100 hectares within one and a half years from date of contract and to cultivate the balance of the 250 hectares within two and a half years; to admit into the plantation two persons, from each province in the Republic, who may wish to obtain practical information in the modern methods of the sugar industry, and to provide them, free of charge, with board and lodging; to build a post office and a schoolhouse in the plantation when the number of laborers there shall have reached 400, and to provide for carrying of mail, free of charge, to and from the nearest port.

On its side, the Government agrees to deed to the concessionaire, without any cost whatsoever to him, 500 hectares of unappropriated lands in the Province of Cocle for cultivation; to permit him to import machinery, apparatus, locomotives, rails, boilers, carts, building materials, etc., free of customs duties; and to recognize this enterprise as a public utility, and, as such, exempt it from national or municipal taxes for a period of ten years from the date on which the production begins.

### LAW ON IMPORTATION OF LIVE STOCK.

The National Assembly of Panama has passed a law regulating the imports of live stock into the Republic. Its principal provisions are as follows: Heifers, 2 years old or less, for breeding purposes, shall be admitted free of customs duties and consular fees, but they must not be used for consumption until five years after they are imported. Male live stock, for fattening purposes, may be imported upon payment of $7.50 per head, but shall not be slaughtered until one year after import.

### EXPLOITATION OF PUBLIC FORESTS.

The legislature of the Republic of Panama has enacted a law prohibiting the sale or lease of public lands in the vicinity of towns from which the residents extract forest products, and permitting the exploitation of forests in public lands. The law also prescribes the duties to be charged upon the products thus extracted.

### TAGUA FORESTS WITHDRAWN FROM ENTRY.

The Acting President of Panama has withdrawn from entry all public lands in the districts of Donoso and Chagres, Colon Province, possessing vegetable ivory (Tagua) forests. Exception is, of course, made of such lands as may have been legally acquired by municipalities or private persons.

# PARAGUAY

### INAUGURATION OF PRESIDENT GONDRA.

Señor MANUEL GONDRA, the new President of the Republic of Paraguay, was formally inaugurated on November 28, 1910. After taking the oath of office he read his interesting message, in which he declared that the new administration will pay especial attention to finance and will endeavor to improve the paper currency by a conversion law.

President GONDRA has appointed his cabinet, as follows: Minister of the Interior, Señor VICTOR SOLER; Minister of Finance, Dr. JOSÉ A. ORTIZ; Minister of War, Col. ALBINO JARA; Minister of Justice, Worship, and Public Instruction, Dr. MANUEL FRANCE; Minister of Foreign Affairs, Dr. EUSEBIO AYALA.

### PROGRESS OF PARAGUAY RAILROAD EXTENSION.

According to a report from the Hon. EDWIN V. MORGAN, American minister to Uruguay and Paraguay, the newspapers of Asuncion announce that the extension of the Paraguayan Central Railway from its present terminus at Yuty, 253 kilometers (157 miles) from the capital to Villa Encarnacion, on the Alto Parana, is nearly completed.

The British minister to Argentina, who is also accredited to Paraguay, traveled in October from Buenos Aires to Asuncion by the Entre Rios and Paraguayan Central lines. The distance between railhead on the former road and Posadas, on the Alto Parana, as well as that between Villa Encarnacion and the railhead on the Paraguayan Central was covered on horseback. The whole journey occupied four days.

### NEW BREWERY IN ASUNCION.

A new brewery has been established in Asuncion under the name of "Cerveceria Nacional," with a capital of $3,000,000. Machinery of the most modern designs will be installed in this plant.

# PERU

### THE PETROLEUM INDUSTRY.

"Peru To-day," a monthly publication of Lima, and one of the best exponents of Peru's development, publishes in a recent issue a valuable article by Mr. F. E. Ross, on the petroleum industry in that

Republic. It is a well-known fact that the Peruvian oil fields are the second in the world in extent, and, although the industry is comparatively in its infancy, the exports of petroleum at present exceed 200,000 tons annually.

According to the article, oil is found in the three northern districts of Tumbes, Pira, and Lambayeque, mainly on or near the coast, and often at a shallow depth, although recent drilling proves its presence in large quantities in a lower sand which had previously been exploited. The first mention of oil in Peru appears in the writings of Padre ACOSTA, who states that the captain of the ship in which he was sailing detected the presence of land by the oily appearance of the water off Cabo Blanco. It was not until 1692, however, that the matter attracted official attention, and the Spanish Crown ceded the entire petroleum territory to Captain GRANDINO. By 1705 this property had come into the possession of the Belén Hospital of Piura, but by 1826 the Peruvian Government must have recovered the title, for at that time it sold it to Señor QUINTANA, who, in turn, sold it the next year to Señor DIEGO DE LAMA. The latter eventually divided it into 13 portions among his children. One of these fractions, covering the ranch of Pariñas and La Brea became the property of Mr. HERBERT TWEDDLE in 1888, from whom it was acquired a year later by the London and Pacific Petroleum Company.

The field known as Negritos or Talara lies about 40 miles along the coast northwest of Paita, the port for the district of Piura, and is the center of drilling operations. Talara, an excellent harbor connected with it by 16 miles of narrow-gauge railway, is the location of the refinery and shipping wharves. The residue, after distilling the volatile oils, finds a ready market as fuel, and for some time has been shipped to Chile, where it is consumed in the nitrate "oficinas."

Besides the oil from the wells scattered throughout the Negritos, or ocean side of the property, a black and extremely adhesive material of an asphaltum nature is found at La Brea, some 25 miles inland. This has heretofore been evaporated and used for coating the inside of "pisco" or "aguardiente" tubs, and for weatherproofing the company's piping, etc., but in its natural state it possesses good lubricating qualities.

The existence of petroleum in the Zorritos field, which lies some 24 miles to the south of Tumbes and is the most northern of the developed properties in Peru, was discovered by DE LAMA in 1862, and the history of its exploitation is a history of repeated financial failures on the part of its early promoters, mainly because they failed to provide sufficient capital. The present owners have, however, fared much better. There are to-day some 50 producing wells, including 3 flowing wells in a recently discovered "deep sand," a complete distilling and refining plant with concrete storage tanks,

a pier with floating pipeline for loading steamers at Zorritos, and extensive yards, wharves, and shops at Callao, where the offices are located. The production of crude oil amounts to 11,000 tons annually; some 500,000 gallons of kerosene and 100,000 gallons of gasoline were refined at Zorritos last year. A recent addition to the plant just made will increase the production of kerosene by 10,000 gallons per month. A lubricant known as "Zorrilina" is secured from the residue of the first distillation, and as this is of a rich character, a good business should result from it. Unfortunately, the demand at present does not justify a proper plant for its treatment, so it is mostly consumed as fuel about the property. There has lately been added to the 750 acres of the original property a tract of oil land just north of the Lobitos field, consisting of some 2,700 acres at Cabo Blanco. Steps are being taken to develop this at once.

The Lobitos field was first prospected in 1901 by the Peruvian Corporation, but only in 1905 was petroleum found in paying quantities. This property now belongs to the Lobitos Oilfields (Limited).

The company is now operating 80 wells, in one case 15 from a single engine. They are also engaged in sinking some deep wells into a hitherto unexplored sand, which they believe underlies their whole field. The entire product is at present marketed in the crude state.

Mention should be made of the work of an American company at Puno, on the shore of Lake Titicaca, a large body of water lying 12,500 feet above the sea on the eastern side of the Andes Range, and forming part of the Bolivian boundary in the southern part of Peru. Unlike the product of the northern districts, the petroleum of Puno has a paraffin base. A considerable sum has been expended in sinking wells, but it has not yet been established as a commercial industry.

In regard to the geology of the region, the article says that the stratification inclines downward from the sea and generally to the east. Wells of a depth of only 260 feet have been successful on the beach and in ravines close by, while those of 800, 1,500, and 1,900 feet are usually somewhat farther back. The wells in the second oil sands have reached depths of 2,400 and 2,600 feet and are self-flowing.

The laws promulgated by the Peruvian Government for the location of oil claims or "denouncements" are liberal, and the rights of the holder are clearly defined and fully protected. After the preliminary cost of survey and location the annual tax is £3 per "pertenencia," the unit of claim (approximately 10 acres), payable semiannually. A bill is before the Peruvian Congress at present providing for the decrease of this tax by half. The holder of oil or other mining rights may purchase by arrangement, or, in case of disagreement, may expropriate such surface land as he may legitimately require for exploita-

tion. The oil districts here described lie mainly in barren and unoccupied land having little or no surface value.

The companies operating in Peru are all sound business enterprises, earning large profits year after year, and are steadily developing and extending their holdings. New people are entering the field, both as prospectors locating new oil fields and as purchasers for exploitation. Peru welcomes and protects capital which comes to aid in the development of its natural resources.

There is a home market for all the kerosene and gasoline that can be produced here at present, besides the demand from neighboring countries, while the residue can be sold for fuel.

### LOAN FOR THE ELECTRIC COMPANIES OF LIMA.

The Associated Electric Companies of Lima have secured from Messrs. J. Henry Schroeder & Co., of London, a loan of £1,200,000. It was effected at the rate of 86 per cent, with 5½ per cent interest, payable semiannually, and 2 per cent amortization. A portion of the receipts from the loan will be used to liquidate obligations of the companies in Europe and the United States. The remainder, about £520,000, will be devoted to the amortization of bonds circulating in Lima and the payment of all other debts.

### HIGHEST MINE IN THE WORLD.

The belief is expressed that the old Caylloma silver mines of Peru have a greater elevation than that of any other great mine in the world. Their altitude varies from 12,000 to 17,000 feet. These properties were worked by the Spaniards in the sixteenth century and probably by the Incas before that.

### DEVELOPMENT OF THE RUBBER INDUSTRY.

From an interesting article published in the London "Financial News" for December 2, 1910, we quote the following paragraphs on the development of Peru's rubber industry:

One of the most important wild rubber-producing areas of the world, yet undeveloped, is that part of the Peruvian territory known as the Montana. This area, which includes the Provinces of Loreto, Amazonas, and parts of Junin, Cuzco, and Hunaco, is over 750,000 square kilometers in extent, or more than five times the area of the United Kingdom. It lies east of the great South American Cordillera, and includes the headwaters of the Amazon and practically the whole of the large tributaries which, flowing eastward from their source amid the perpetual snows of the Andes, join the main stream before passing the eastern international boundary, and provide Peru with one of the world's most extensive systems of navigable rivers. This entire area is, more or less, a gigantic forest, wherein the vegetation is in many places so dense as to be at times almost impenetrable; but wherever rubber collectors have gone, it has been proved that in every part of the region the best class of rubber-producing trees flourish to an extent unexcelled by any similar area in the world.

It is admittedly the habitat of the Hevea Brasiliensis, the Caoutchouc tree, and the Castilloa Elastica, all noted for their large yield of latex and the resiliency of their product. The tapping of these giant rubber trees of Peru can be carried on apparently indefinitely, without seeming to exhaust the supply of latex, and without the danger from overtapping which awaits the possessor of more recently planted rubber areas.

A serious disadvantage, which must soon disappear, is the difficulty of transporting the rubber, when collected, to the Peruvian ports on the Pacific coast. The Government has now signed a contract for the extension of the Southern Railway from Callao to Cerro de Pasco, on to the Ucayali River, and it is reported that a contract for an equally important connection from the port of Paita, in the north, to Puerto Limon, on the Maranon River, is likely to be taken in hand at an early date by an important firm of European contractors. Either of these railways, when completed, will enable Peru to retain the rubber trade in her own territory. Although the distance which divides the Pacific coast from the Montana is comparatively short (about 200 miles), its great difficulty, from an engineering point of view, arises from the necessity of crossing the Andes. The cost of supplies for the rubber collectors will be considerably cheapened, and the 4,000 kilometers of river freight from Iquitos down the Amazon to the Atlantic will be avoided, as well as the tax which Brazil exacts on rubber passing through her territory. At present transport through the mountain passes between the Montana and the Pacific ports is carried by mule teams, but it is both expensive and slow, and effectually prevents the rubber collecting companies from making their output as large as they would be easily able to do were a speedier and cheaper means of transport available. With all these disadvantages the cost of delivery of the best class of Peruvian rubber at Liverpool, which includes all rents and taxes in Peru, is well under 4 shillings per pound. The lower-grade qualities, requiring less labor for their preparation for the market, also show a handsome profit, in spite of the seriously diminished price for inferior grades during the past few months.

With improved and more rapid communication and the cost of supplies cheapened, an increased amount of capital is certain to find employment in this region; for owners of "estradas," or "rubber walks," also make a profit out of supplying goods and provisions to the collectors, as well as the profits on the sale of the rubber to the merchants at the port of shipment. Capitalists will be able to find remunerative investments from increasing the steamboat service on the 15,000 kilometers of navigable waterway in eastern Peru. At present the trading centers are limited to the river ports of Palmella, Caballacocha, and Pebas, on the Amazon River; to Puerto Limon, Nuta, San Regis, Parmari, and Pebas, on the Maranon River; to Yurimaguas and Contumana, on the Huallaga; to Masisea, on the Ucayali; to Puerto Victoria, on the Pachitea; and to Sepagua, Mishagua, and Camisea, on the Urubamba River. These are but a few of the largest navigable streams traversing the Montana, and the importance of this cheap river transport for the development of the natural riches of so extensive a region can hardly be overestimated.

There are three classes of Peruvian rubber known in the English market: "Peruvian Fine," "Mollendo," and "Caucho Ball," or "Peruvian Slab." Between the first two, which are simply grades of the product of the Hevea Brasiliensis, there is very little difference in the market value. The "Caucho Ball," or "Peruvian Slab," is obtained from the caoutchouc tree, belonging to a totally different class from the Hevea. The caoutchouc tree grows on the mountain slopes, at a higher altitude than the Hevea or other rubber producers, and instead of being tapped it is cut and the trunk "bled to death." Each trunk produces a large quantity of latex—as much as 20 pints—and from the stump left in the ground a new tree arises, which matures in five years and can then be cut down again, to undergo a similar process. The price of "Peruvian Slab" is now about 50 per cent less than "Peruvian Fine," but the

small amount of labor required and the large yield of latex make ample amends for any decrease in price of the product.

The laws of Peru are most favorable to the rubber industry. Title to the rubber-bearing lands is acquired by leasing so many acres of rubber lands, or by renting an "estrada," or "rubber walk." The lease (renewable) is granted for a period of ten years, and the lessor undertakes not to cut down or to destroy any trees, as well as to pay a royalty of 4s. for every 101 pounds of rubber obtained from the estate. Each estrada consists of 150 rubber-producing trees, the rent of which is fixed at 5d. per annum, together with 5d. for each 2 acres of ground on which the trees are located. In addition, in both cases, there is the ordinary export duty, which works out at about 3½d. per pound. Cash guaranties have to be given by applicants for leases and "estradas" for the due observance of the conditions, which amount to 2s. for each 2 acres of land leased; the amount can be deposited in internal debt bonds, the depositor thus securing a good interest upon the money so deposited. The determination of the Government to do everything that is possible to improve the transport facilities of the country, as well as the favorable natural conditions and the greatly enhanced value of the product, has greatly stimulated the rubber industry of Peru. The total quantity exported for the year 1909 was approximately 2,000,000 pounds, and it is certain that the quantity for the present year will be greatly in excess of this figure. All the companies which are now engaged in exploiting rubber lands have made very substantial profits. So far, very little English capital has found its way into Peru; but Commander Olivare states that, from his personal knowledge of the lands which English companies have acquired, he is quite sure they can not fail to make satisfactory profits for the shareholders if carefully managed and the companies have not been overcapitalized.

The Peruvian Government has not lost sight of the importance of plantations as economical rubber producers, although the vast areas of rubber forest make it at present unnecessary to give too much attention to the cultivation of rubber trees. A law has already been approved under which the Government will pay a premium of 1 shilling for each rubber tree of three years old grown on a plantation. This amount, small though it seems, is more than sufficient to recoup the planter the cost of the land and its clearing, with a substantial portion of the cost of planting the rubber trees. Capital carefully invested under these conditions has practically a Government guaranty of repayment at the end of three or four years, while the investor would have his rubber plantation as clear profit. Under the favorable conditions which exist throughout the Montaña, such a plantation could not fail to be highly profitable, and tests already made with rubber trees on plantations have given marvelous results, the trees, owing to the suitability of soil and climate, acquiring a thickness of 8 inches to 10 inches in the three to four years. According to Commander Olivara, an officer in the Peruvian Navy, who has been intrusted by his Government with the work of inspecting the rubber lands on the Montaña, who has taken the trouble to make himself thoroughly acquainted with the conditions in the "middle east," the capital value of a plantation in Peru should be greater than in the "east," for the reasons that the Montaña is the natural home of the rubber tree. Land is cheaper, labor is cheap, and the Government subvention at the end of three years means a return of capital when the planter is most likely to need it. Under such conditions it would appear that investors might, with profit, turn their attention to the possibilities of rubber growing in Peru.

# SALVADOR

### IMPORTS FROM UNITED STATES.

According to official statistics just received from the Republic of Salvador, the imports into the country from the United States during the first quarter of 1910 amounted to $326,078.74 gold. The principal articles imported, by rank of importance, were:

| | |
|---|---|
| Fancy articles | $75,146.65 |
| Flour | 64,161.59 |
| Shoes | 38,906.65 |
| Drugs and medicines | 23,297.87 |
| Hardware | 15,716.65 |
| Machinery | 7,339.11 |
| Foodstuffs | 5,966.32 |
| Fertilizers | 4,800.00 |
| Wire fencing | 4,310.75 |
| Kerosene | 3,959.95 |
| Glassware | 2,376.31 |
| Wines | 2,300.78 |
| Liquors | 1,826.05 |
| Agricultural implements | 1,155.40 |

# URUGUAY

### INTERNATIONAL POSTAL CONGRESS.

An International Postal Congress will meet, at the invitation of the Government of Uruguay, at Montevideo, in January, 1911. Delegates from the ten Republics of South America will attend, and they will discuss the basis of a postal union to be formed by these Republics of the southern continent.

### LOAN FOR MONTEVIDEO.

The Uruguayan Congress has authorized the Executive to contract a loan for $2,000,000, bearing 5 per cent interest and 1 per cent amortization, to pay off the mortgage bonds on the Montevideo electric-light station. The service of the loan will be met by the revenue from the station.

### OPENING OF PORTS ON THE YAGUARON AND LAKE MERIM.

In view of the opening of the River Yaguaron and Lake Merim to Uruguayan traffic, a decree has been issued from the Ministry of Finance qualifying the following ports for the customs dispatch of

merchandise: Artigas, Paso de las Piedras, Centurion, Sarandi, and San Diego, under the jurisdiction of the Yaguaron; and, under the the jurisdiction of Lake Merim, Puerto Amaro, on the River Tacuari, Cebollati (La Charqueada and Tres Bolas) on the river of that name, San Luis and San Miguel. The decree also creates the corresponding customs offices and officials.

### IMPORTANT RAILWAY PROPOSED.

The press of Montevideo announces that the Government of Uruguay has received and is studying a proposal to build a standard gauge railway starting from Montevideo, or some other point on the Uruguay River, and traversing the Republic as far as the Cuareim River, the northwestern border of Brazil.

The concession would also include powers to expropriate for purposes of agricultural colonization, up to 10,000 hectares (24,711 acres) of land in the vicinity of each station, the stations not being more than 15 kilometers (9⅓ miles) apart from each other, and to construct ports, wharves, depots, elevators, etc., on the River Uruguay. No State guarantee is asked, but the privilege that, for twenty years no other railways (except cross lines) may be built within 20 kilometers of the line.

### NEW STEAMSHIP LINE FOR MEAT TRADE.

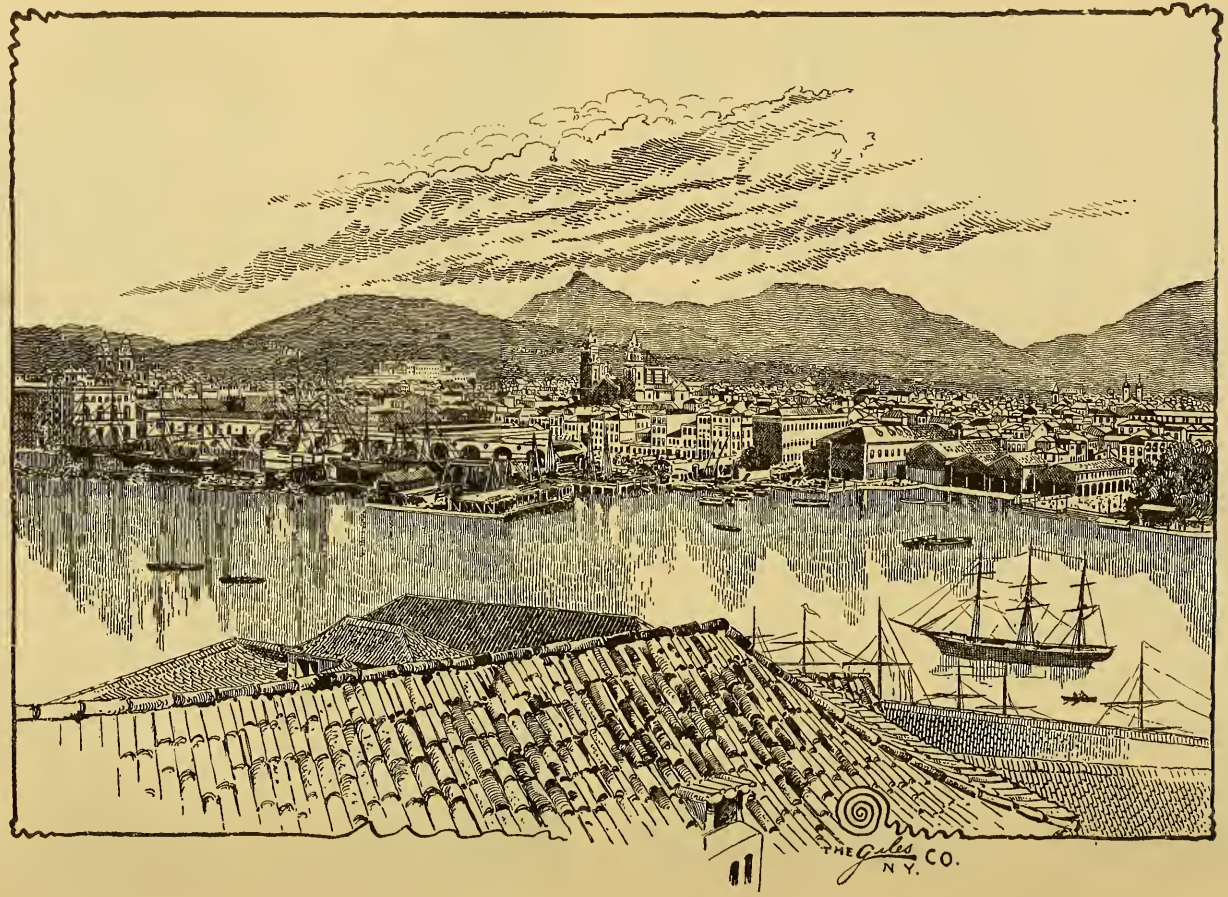
The Royal Steam Packet Company and Messrs. Furness, Withy & Co. have entered into an agreement by which the former will carry frozen meat from the River Plate to Europe. It is the intention of the steamship company to build six new steamers equipped with chilled chambers for this purpose. One of these steamers has already been launched.

### CULTIVATION OF TOBACCO IN URUGUAY.

Vice-Consul Goding, of Uruguay, reports that tobacco culture is carried on at several points in the northern part of the Republic, principally in the Departments of Tacuarembo and Rivera, and to some extent in Canelones and Montevideo. During the year 1908–9 there were 1,910 acres under cultivation yielding an average of 774 pounds per acre. The total output for that year was 740 tons, yielding an internal revenue to the Government of $610,417.

### THE SOUTHERN EMBANKMENT OF MONTEVIDEO.

The President of the Republic of Uruguay has recently promulgated the law approving the contract for the construction of the southern embankment of Montevideo.


THE Gates CO.
N.Y.

The "Montevideo Times," commenting upon this most important and costly improvement, says:

The extension of the embankment will be about 4,000 meters, or nearly 2½ miles. It will start from the base of the eastern or Sarandi breakwater and be carried round in a gentle curve to the front of the Parque Hotel at the Playa Ramirez. There it will join the series of partial embankments and esplanades built by the municipality, and eventually carried to Punta Carretas and Pocitos, giving a total of over 5 miles of embanked sea frontage. The embankment will also be carried northward over the eastern breakwater, to join the base of the new mole to be built. This will permit the establishment of tram and water services for passengers from the mole to Ramirez and Pocitos, along the sea front.

The height of the roadbed above sea level will be 4 meters, or 13 feet. The outer sea wall of the embankment will be a distance varying from 300 to 600 meters (328 to 656 yards) from the present irregular coast line, though naturally less at the two extremities, where it gradually curves to join the shore. This will mean the reclaiming from the sea of 145 hectares (358 acres) of land. Of this, 29 hectares (71.6 acres) will be occupied by the embankment proper, which will be given a uniform breadth of 70 meters (229 feet); 36 hectares (88.92 acres) will be taken up by streets and plazas or open spaces; and the remaining 80 hectares (197.6 acres), to be divided equally between the Government and the concessionaires, will be available for building purposes.

This means, in effect, an addition to the city, on the south side, of an area over one-third of that at present occupied by the old city. The city will be broadened on its whole southern side by a strip of land 300 to 600 meters—say, three to six squares—in breadth and over 2 miles in length.

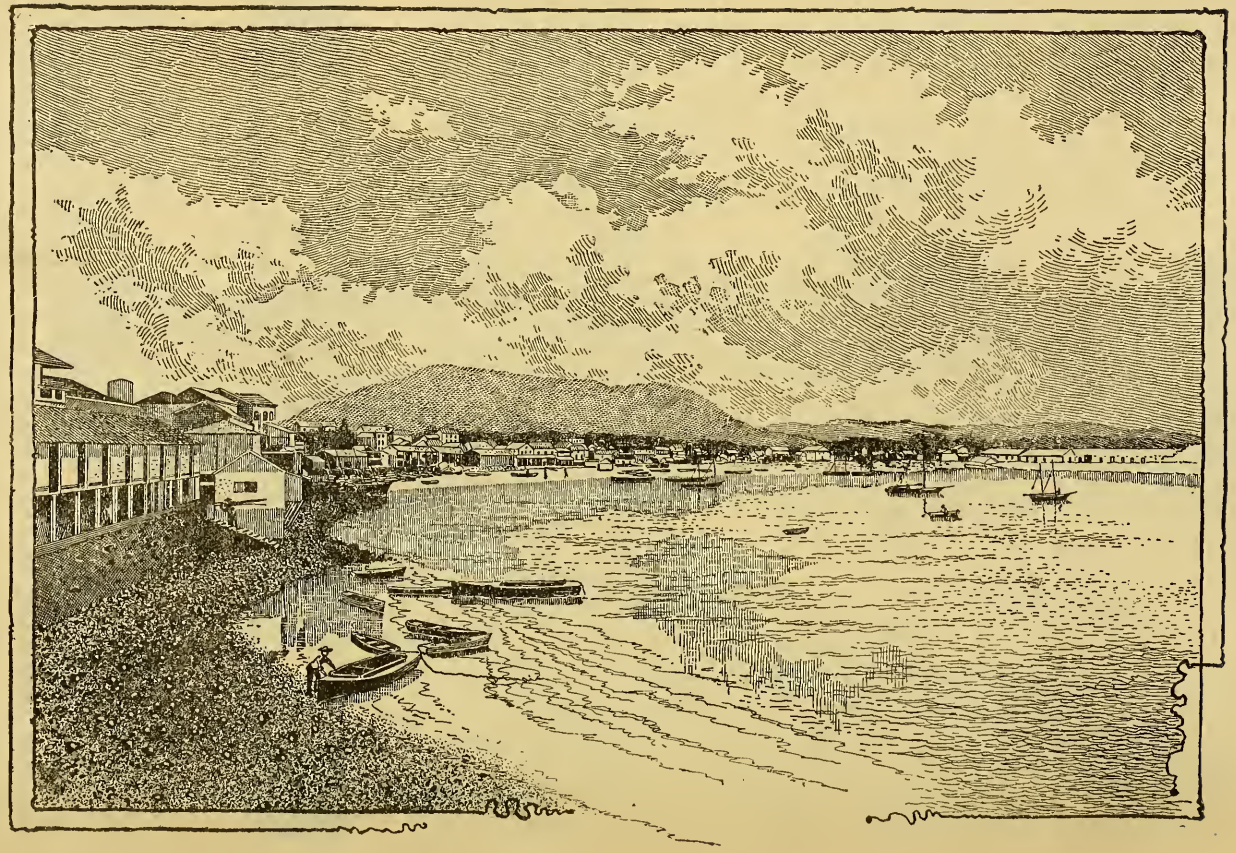
The construction of the embankment will set in movement a capital of $8,000,000 or $9,000,000, a small part of the amount which must follow, since the reclaimed lands, sooner or later, will have to be developed with buildings—public offices, hotels, boarding houses, shops, commercial and industrial establishments, schools, gardens, new places of amusements, etc. All of these, in turn, imply an important extension of the municipal and public services, paving, drainage, public and private electric lighting, gas and water supply. There will also be new railways and new routes. This, of course, will be the work of many years, but the embankment itself will be finished in five years or less.

# VENEZUELA

## ARTICLES EXEMPT FROM DUTY.

The President of the Republic of Venezuela has ordered the admission into the country of the following articles free of customs duties:

Disinfecting apparatus in which formol, sulphur, sublimate, or lysol is used; traps and all kinds of apparatus for trapping mice and rats; compositions known as "rat killers" and "rat pest," both used in exterminating mice and rats; iron sulphate, copper sulphate, formol, sulphur, sublimate, phenic acid, hypochlorite of salt, sodaic chrysodol, creossoline, calcium chloride, Yersin serum, Haffkine lymph, arsenic, "ratices," and powders and tablets for killing insects;



sanitary water-closets, urinals, and sinks; substances known as chloro, naphthteleum, and hyco; formaldehyde apparatus, liquid eucalyptus, and insect-killing machines.

### NEW ISSUE OF POSTAGE STAMPS.

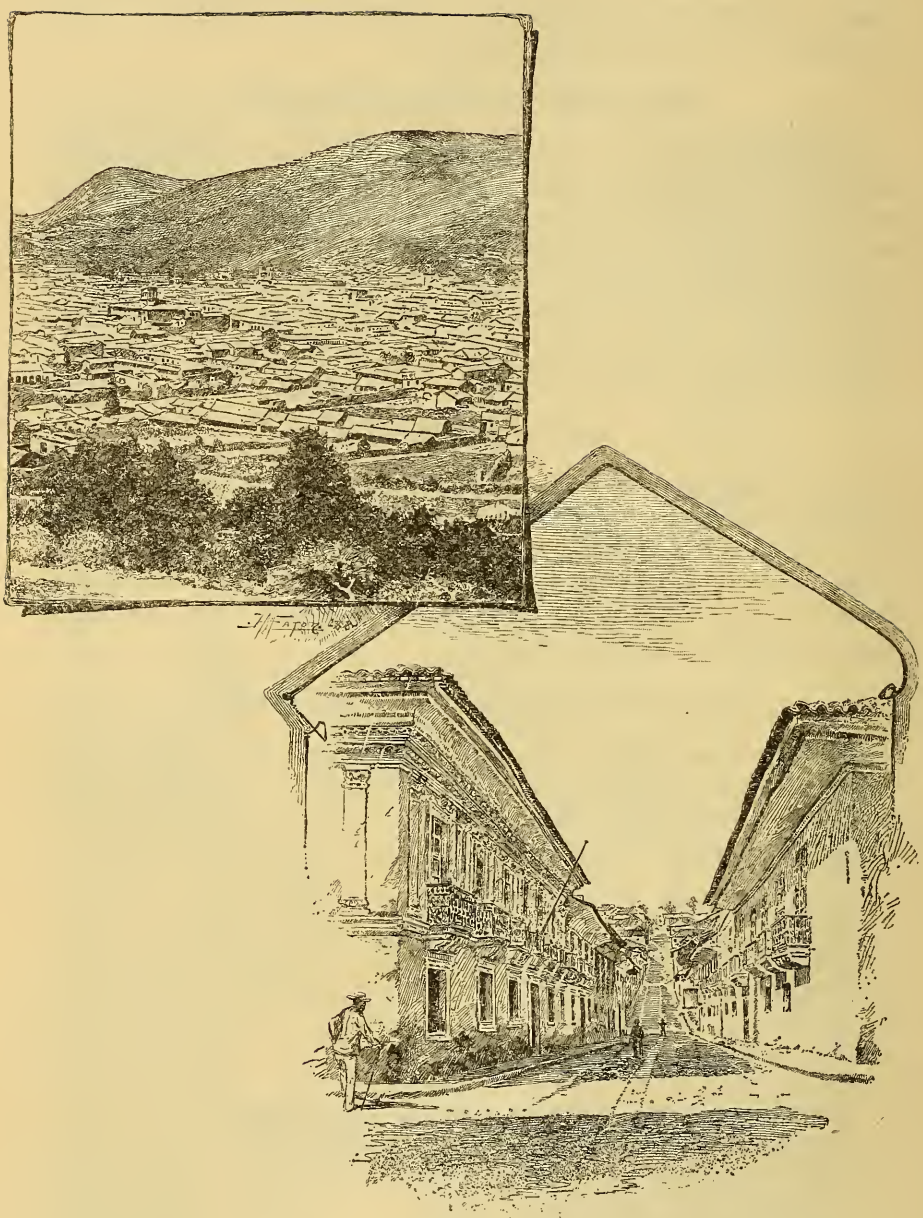
President GOMEZ, of Venezuela, has ordered a new issue of postage stamps of the following denominations, colors, and designs: Stamps of 5 centimos of bolivar, green, with the bust of General MIRANDA; stamps of 10 centimos, red, with same design; stamps of 15 centimos of bolivar, gray, with bust of General URDANETA; stamps of 25 centimos of bolivar, dark blue, with same design; stamps of 50 centimos, orange yellow, with the bust of BOLÍVAR, the Liberator; stamps of 1 bolivar, yellow, with same design.

### TANNIN CONCESSION.

The Venezuelan Government has granted a concession for the establishment in the Republic of a factory or factories for the extraction of tannin (tannic acid or gallotannic acid) from plants, and to promote, by every possible means, the cultivation of tannin-producing plants. This concession is in the nature of an exclusive franchise for a term of two years.

### FIRST STEAMBOAT BUILT IN VENEZUELA.

American Consul HERBERT R. WRIGHT, at Puerto Cabello, reports that the first steamboat ever built in Venezuela was launched recently at the Venezuela navy-yard at Puerto Cabello. The President of Venezuela officiated at the launching.



INTERNATIONAL UNION OF AMERICAN REPUBLICS

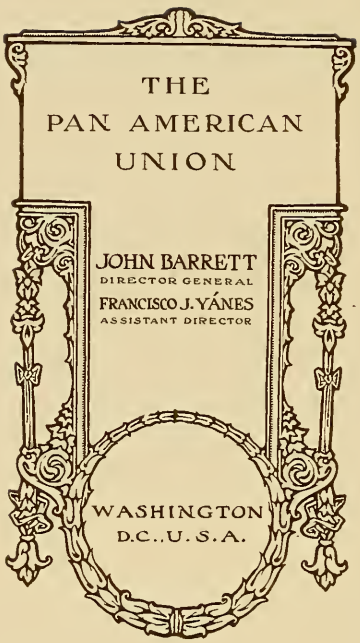
# BULLETIN

OF THE

# PAN AMERICAN UNION

FEBRUARY 1911

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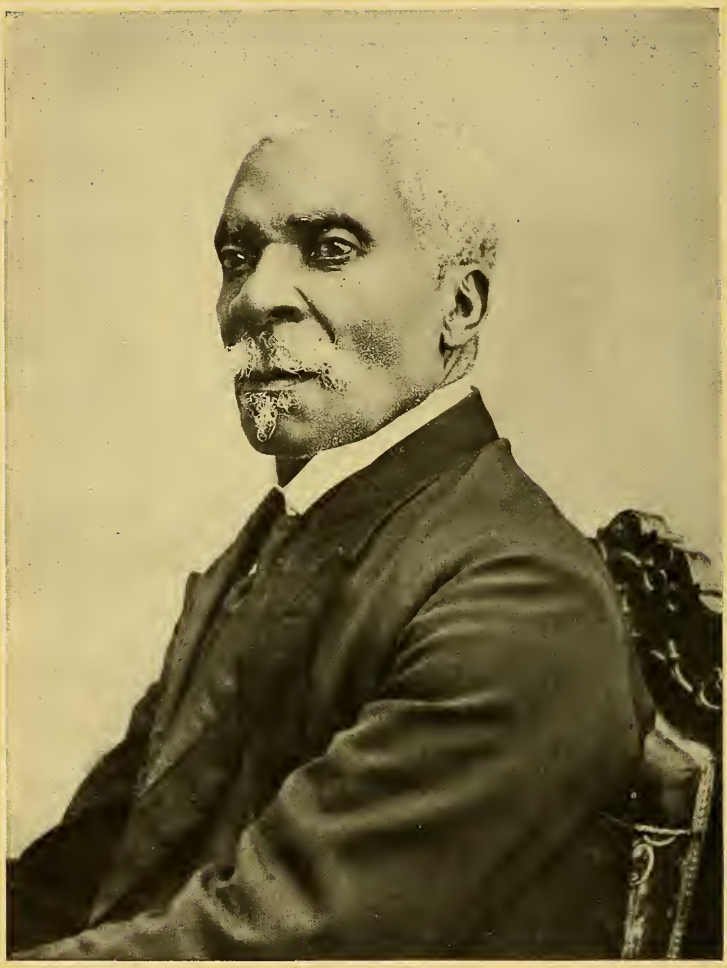
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GENERAL ANTOINE F. C. SIMON,

President of the Republic of Haiti

BULLETIN
OF THE PAN AMERICAN UNION

VOL. XXXII. FEBRUARY, 1911. NO. 2

AS this issue of the BULLETIN comes from the press it is probable that the Pan American commercial conference described in previous issues will be opening its sessions, which are to occupy the greater part of the week of February 13–18. The President of the United States and the Secretary of State have both shown their interest in the conference and their appreciation of its importance as an influence for the development of Pan American commerce and comity by accepting invitation to be present at the first session on Monday afternoon, the 13th, and deliver addresses. At this writing it is expected that additional addresses will be made by members of the Latin American Diplomatic Corps forming the Governing Board of the Pan American Union and by other distinguished guests. The practical discussion and expression of opinion upon conditions affecting the exchange of trade among the American countries begins on Tuesday morning, the 14th, and continues for several days. The best available trade experts, both official and private, will participate in the conference from day to day, while their remarks will be interspersed by brief speeches from the ministers and consuls of Latin America accredited to the United States. As the BULLETIN goes to the printer, some three weeks before the holding of the conference acceptances to send delegates or representatives have been received from nearly 400 commercial organizations and prominent manufacturing, exporting, and importing companies in different parts of the United States. On account of the shortness of time between the decision to hold the conference and its meeting and the desirability of its coming together before the adjournment of this session of the United States Congress, it was not feasible to invite delegates from the Latin American countries. This difficulty, however, has been offset by the promised participation of the able diplomatic and consular representatives of those countries, and by trade experts of exporting and importing firms which have been doing an extended business with the countries lying to the south of the United States. The comment of newspapers has been favorable to the holding of the conference and the general feeling is that much practical good will result from its sessions.



Courtesy of "A illustracao Brazileira."

INAUGURATION OF THE NEW PRESIDENT OF BRAZIL.

View of the Brazilian Senate, showing Marechal Hermes da Fonseca taking the oath of office. Quintino Bocayuva, the President of the Senate, is standing in the center, with Marechal Hermes on his right, and Dr. Wenceslão Braz, the Vice President, on his left.

In many respects it will differ radically from other trade gatherings. Above all things, it will be a practical meeting providing the fullest opportunity for the exchange of opinions, and the asking and answering of questions, instead of a long program of set speeches in which the great majority of delegates are simply listeners and not participants. Various individuals will be asked to open and lead the discussions subject to the questions, during and after their remarks, of the others present, and by the elaboration of the delegates as they may see fit. It will not be permitted, however, to introduce or discuss political or partisan resolutions; in other words, controversial political issues will be avoided, although an expression of difference of opinion on practical, nonpolitical methods of extending trade will be welcome. Each person invited to speak will be expected to confine his speech on the floor to a brief limit, with the privilege of extending it in the printed records of the conference.

While the list at this writing is far from complete and will have many names added, it can be stated that the following representative authorities and experts will participate in the proceedings: HENRY WHITE, ex-Ambassador to Paris and chairman of the United States delegation to the Fourth Pan American Conference; LEWIS NIXON, the noted shipbuilder; ENOCH H. CROWDER, PAUL S. REINSCH, L. S. ROWE, of the same delegation; EDWARD B. MOORE, Commissioner of Patents; WILLIAM R. SHEPHERD, secretary of the United States delegation to the Fourth Pan American Conference; CHARLES H. SHERRILL, United States Minister to the Argentine Republic; CHARLES M. PEPPER and MARK H. DAVIS, special tariff and trade experts of the State Department; H. PERCIVAL DODGE, Chief of the Latin-American Division of the State Department, and HENRY L. JANES of the same division; THOMAS C. DAWSON, United States Minister to Panama; JAMES A. FARRELL, president of the United States Steel Corporation; ERNEST H. WANDS, Commissioner-General to the Argentine Exposition; JULIUS G. LAY, United States Consul-General to Rio de Janeiro, Brazil; FREDERIC W. GODING, formerly United States Consul to Montevideo, Uruguay; ISAAC A. MANNING, United States Consul at La Guaira, Venezuela; SHELDON WHITEHOUSE, Secretary of United States legation at Caracas, Venezuela; ALEXANDER H. BENSON, Secretary of United States legation at La Paz, Bolivia; BERNARD N. BAKER, of Baltimore; LORENZO DANIELS, of the Lamport & Holt Steamship Co.; CRAWFORD H. ELLIS, of the United Fruit Company; ALBERT G. ROBINSON, the well-known authority on Cuba; WILLIAM E. CURTIS, the celebrated newspaper correspondent; W. A. GRAHAM CLARK and A. B. BUTMAN, special agents of the Bureau of Manufactures, Department of Commerce and Labor; C. A. GREEN and FRANCIS B. PURDIE of R. G. DUN & CO.; and FRANCISCO J. YÁES, Assistant Director of the Pan American Union, FRANKLIN ADAMS, W. C. WELLS, W. P. MONTGOMERY, ALBERT HALE, GRANVILLE FORTESCUE, and others of the staff of the Pan American Union.



Photograph by Harris-Ewing.

SPECIAL AMBASSADOR JOAQUÍN D. CASASÚS OF MEXICO AND THE MEMBERS OF THE SPECIAL EMBASSY.

Standing from left to right, behind Special Ambassador Joaquín D. Casasús, are, Señor Don Jorge L. Canalizo, Civil Attaché of the Special Embassy; Señor Don Manuel A. Esteva, First Secretary of the Special Embassy; Capt. Eduardo Elizondo, of the Mexican Army, Military Attaché of the Special Embassy; Capt. Harry N. Cootes, United States Army, assigned as Aide-de-Camp to the Special Ambassador during his stay in the United States; Señor Don Alberto Carreño, Private Secretary to the Special Ambassador.

## VISIT OF SPECIAL AMBASSADOR CASASÚS OF MEXICO.

It affords the BULLETIN much pleasure to extend a hearty welcome to Señor Don JOAQUÍN D. CASASÚS, who is at present in Washington as Special Ambassador of President DIAZ, to convey the thanks of his country to President TAFT and the people of the United States for their participation in the centennial celebration of Mexico last fall. Señor CASASÚS is no stranger to this country, but has a wide circle of friends and acquaintances here, acquired during his service as Mexican Ambassador to the United States some few years ago. In Mexico, Señor CASASÚS holds a place of unusual distinction. He is regarded as the head of the Mexican bar, is a noted authority on matters of finance, and has gained international prominence as a writer. During his stay here many luncheons and dinners have been arranged in his honor, and it is pleasing to note the personal element of former friendships entering into the hospitalities extended to him. Among the functions tendered to the Special Ambassador was a dinner at the White House by President TAFT, at which were present to meet Señor CASASÚS, the Chargé d'Affaires of the Embassy of Mexico; Señor Don MANUEL A. ESTEVA; Señor Don ALBERTO CARREÑO; Capt. EDUARDO ELIZONDO; Señor Don JORGE L. CANALIZO; the Secretary of the Treasury; the Secretary of Commerce and Labor; Senators GEORGE C. PERKINS, JOSEPH W. BAILEY, LEE S. OVERMAN, FRANK P. FLINT, ELIHU ROOT, and Col. I. CRAWFORD; Representatives JAMES L. SLAYDEN, DAVID J. FOSTER, and GEORGE W. FAIRCHILD; the Chief of Staff of the Army; Rear-Admiral RICHARD WAINWRIGHT; the Third Assistant Secretary of State; the Director General of the Pan American Union; former Governor of Massachusetts CURTIS GUILD, Jr.; Justice JAMES W. GERARD; Col. CHARLES ALEXANDER ROOK; Col. CECIL LYON; Capt. HARRY N. COOTES; Lieut. BRYON A. LONG; and Capt. ARCHIBALD W. BUTT. The Secretary of State gave a dinner at his home in honor of the Special Ambassador, as did the Mexican Ambassador Señor Don FRANCISCO LEON DE LA BARRA and the Ambassador of Japan. Complimentary luncheons to Señor CASASÚS were tendered by the French Ambassador and Madame JUSSERAND, and by the Director General of the Pan American Union. This latter event was held in the beautiful Hall of the Republics in the new building, and present as guests of the Director General were the Special Ambassador, the Latin-American Diplomatic Corps, the Secretary of Commerce and Labor, Representative DAVID J. FOSTER, the members of the Special Embassy, and representatives from the Department of State. Señor CASASÚS returned the courtesies by a dinner to the Vice-President of the United States and the members of the Senate and House, and a luncheon to the Secretary of State. The BULLETIN takes advantage of this opportunity to express its wishes to the Special Ambassador for a most enjoyable stay in this country.



DR. FRANCISCO CARRERA JÚSTIZ,

Retiring Minister of Cuba to the United States.

### DEPARTURE OF THE CUBAN MINISTER.

Another change in the Governing Board of the Pan American Union takes place with the departure of Dr. FRANCISCO CARRERA JÚSTIZ, Minister of Cuba to Washington. Dr. CARRERA JÚSTIZ, who is a Professor at the Havana University and a legislator and publicist of note, has been representing Cuba in the United States only since April, 1910. During this short time, however, he has made many friends who will regret his departure, as will also his colleagues and the Pan American Union, which takes this occasion to express to Doctor CARRERA JÚSTIZ its sincere wishes for a successful career.

---

### A MONUMENT TO NABUCO.

Due to the initiative of one of the leading and most enterprising papers in Brazil, the "Diario de Pernambuco," of Recife, a competition has been opened for designs for a monument to the memory of the late Ambassador NABUCO, a distinguished citizen, patriot, scholar, and humanitarian. This monument is a token of respect for the many accomplishments and rare virtues of Doctor NABUCO, and will be raised by public subscription among the citizens of the State of Pernambuco. Both native and foreign artists have been invited to participate in the competition, which will close on March 31, 1911. The statue will be in bronze, on a granite pedestal, with allegorical representations, also in bronze, of the main points in the public life of the great Brazilian, to whose untiring propaganda was due the final abolishment of slavery in Brazil. Doctor NABUCO was one of the staunchest defenders of Pan Americanism, and a great admirer of the United States. As a member of our Governing Board, he was respected by all his colleagues. The news of this mark of esteem by his people finds sincere and warm applause in the Bulletin, which expresses the hope that this monument to be erected at Recife will be a fitting memorial to a great man.

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### PANAMA ON THE GOVERNING BOARD.

It is with genuine regret that the Pan American Union bids godspeed to Señor Don CARLOS CONSTANTINO AROSEMENA, Minister of Panama to the United States and an honored member of our Governing Board. Señor AROSEMENA came to Washington in a diplomatic capacity at the time when the Legation of Panama was established, holding then the position of First Secretary. As a reward for his services, in November,



Photograph by Harris-Ewing.

SEÑOR DON CARLOS CONSTANTINO AROSEMENA,

Retiring Minister of Panama to the United States.

1908, he was appointed Envoy Extraordinary and Minister Plenipotentiary, a post which he has held with honor and dignity since then. Señor AROSEMENA has always been an enthusiastic colaborer in Pan American work and a distinguished member of our Governing Board.

Dr. BELISARIO PORRAS, who has been appointed to succeed Señor AROSEMENA, is not a stranger to Washington nor to the Pan American Union. As the Envoy of Panama, on Special Mission, in April of last year, he became well acquainted with this institution and its ideals. At the Fourth Pan American Conference, recently held at Buenos Aires, as the Delegate of Panama, Dr. PORRAS was one of the members of the "Committee on the International Bureau of American Republics," which recommended the resolution by which the name of the Bureau was changed to the "Pan American Union." To Dr. PORRAS we extend a hearty welcome.

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## THE NATIONAL TARIFF COMMISSION ASSOCIATION AT THE NEW BUILDING.

The National Tariff Commission Association, formed in Indianapolis in 1909, held their annual national convention in Washington, D. C., on January 11 and 12, with an attendance of nearly 1,000 members. The organization represents practically 100 public commercial bodies, besides a large number of business firms and individuals. As many of the delegates were keenly interested in the Pan American Union, the Director General extended to the Association an invitation to visit the building, informally, on the afternoon of January 12. This invitation was accepted by the Secretary of the Association, Mr. HENRY T. WILLS. Unfortunately the illness of the Director General compelled him, at the last moment, to send his regrets at his inability to be present in person, but the Assistant Director welcomed the delegates, and the purpose and activities of the Pan American Union were explained in a few words. The delegates were then escorted through the building by members of the staff. That a deep interest was shown by the Association in Latin America, and in the further extension of all activity making for Pan American friendship and commerce was manifest in the attention given to the Union itself and the description of the work accomplished by it.

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## THE PAN AMERICAN SOCIETY OF THE UNITED STATES.

Everything looks well for the success and usefulness of the Pan American Society of the United States. Definite information is being awaited in regard to the reported visit to the United States of the Vice President of the Argentine Republic, in order that the first public action of this society may take the form of a dinner in his honor. In

the last issue of the BULLETIN there was published a list of representative men who had accepted membership. Since then this has been greatly increased, and now the situation confronts the society of keeping its members within reasonable limitations in order that it may not become cumbersome and useless. The by-laws and permanent officers will soon be announced. At this writing they are under consideration in the hands of a special committee.

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### A NEW MEMBER OF THE GOVERNING BOARD.

It is with special pleasure that the executive officials of the Pan American Union welcome to the membership of the Governing Board, Señor Don SALVADOR CASTRILLO, the newly accredited representative of Nicaragua. Some time has passed since the chair of Nicaragua at the Governing Board table has been occupied. Although that Government has not been represented on the Board for some period, nevertheless the Union itself, in its publications and correspondence, has continued to publish and give all the information possible in regard to the commerce, the development, and the possibilities of this resourceful and interesting country. Nicaragua has the best wishes of the editorial staff of the BULLETIN for the enjoyment of a long continued period of peace and prosperity, and it will be glad to cooperate with the new Minister, Señor CASTRILLO, in doing everything in its power to build up the commerce of Nicaragua with its sister Republics and in making its resources widely known throughout the world.

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### THE UNITED STATES MINISTER TO PERU.

H. CLAY HOWARD, recently appointed United States Minister to Peru, was born at Mount Sterling, Kentucky, November 14, 1860. He was educated at private schools, and then accepted a position as clerk in the United States Treasury Department. While in the Government service Mr. HOWARD studied law at the Columbian (now George Washington) University, graduating, as president of the class in 1884, and then spent another year in post-graduate work at the University. In 1885 he was admitted to the bar of the Supreme Court of the District of Columbia, and two years later resigned his position with the Treasury Department to practice law in Paris, Kentucky, his present residence. Mr. HOWARD enjoyed an extensive practice in the State and Federal courts of his native State as well as in the United States Supreme Court. In 1894 he was elected judge of the Bourbon County court, and several years later was honored with an appointment as referee in bankruptcy.



Photograph by Harris-Ewing.

DR. SALVADOR CASTRILLO.

Envoy Extraordinary and Minister Plenipotentiary of Nicaragua to the United States.

### GROWTH OF CORRESPONDENCE OF THE PAN AMERICAN UNION.

A list which has recently been compiled by the file clerks of the Union, giving the names of commercial organizations, firms, educational institutions, and individuals in public and private life throughout the United States who have called upon the Pan American Union for information regarding Latin America during the past year, is both surprising and interesting. It proves conclusively the growth of appreciation of the usefulness of the Pan American Union, and it shows how widespread is the increasing interest in the Latin American countries and in Latin American affairs. The Director General hesitates to give the exact figures showing the growth of correspondence of this office lest he be accused of exaggeration. If any person who reads the BULLETIN should be in the slightest degree skeptical of the practical work being done by the Union, and of its realization by varied interests in all parts of the United States and Latin America, he could not fail to have that skepticism removed were he to see the volume of daily correspondence that pours in and goes out from the Union.

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### THE MEXICAN SOCIETY OF NEW YORK.

It is with pleasure that the BULLETIN announces the organization of the Mexican Society of New York. Its president is JAMES W. GERARD, of the New York Supreme Court, and representative of the United States to the recent celebration of Mexico. The vice president is JAMES SPEYER, one of the leading bankers of New York City, while the secretaryship is held by WILLIAM H. SHORT, who is also secretary of the New York Peace Society. JAMES R. TROWBRIDGE is the treasurer. The Society has done itself honor by electing Señor Don FRANCISCO LEON DE LA BARRA, Mexican Ambassador to the United States, as its honorary president. The honorary vice presidents are the following: JOHN JACOB ASTOR, JOHN BARRETT, HERMON C. BUMPUS, NICHOLAS MURRAY BUTLER, DAVID J. FOSTER, JOHN W. FOSTER, ELBERT H. GARY, CURTIS GUILD, PAUL HUDSON, ARCHER M. HUNTINGTON, RALPH PULITZER, LEO S. ROWE, WILLIAM R. REICK, JACOB H. SCHIFF, THEODORE P. SHONTS, MELVILLE E. STONE, CORNELIUS VANDERBILT, while the executive committee includes the officers and the following trustees: DAVID P. BENNETT, MANUEL A. ESTEVA, GEORGE B. FIFE, RAFAEL O. GALVAN, BENJAMIN GUINNESS, HAMILTON HOLT, FREDERICK LYNCH, ALBERTO LEON, ALBERTO LEON, JR., SEVERO MALLET-PREVOST, J. A. MEDINA, ARTHUR W. PAGE, HENRY CLAY PIERCE, C. ROMERO, LINDSEY RUSSELL, WM. R. SHEPHERD, ARTHUR E. STILLWELL, WM. D. THORNTON, JOHN F. WALLACE.

At this writing it is planned to give a dinner in honor of Señor Don JOAQUÍN D. CASASUS, Special Ambassador, who is now in Washington on a special mission.

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### INFORMATION ABOUT LATIN AMERICAN NEWSPAPERS.

A practical work that the Pan American Union has recently undertaken and which is looked upon with much favor, not only by the exporters of the United States but by the press of all Latin America, is the compiling of authoritative information in regard to advertising rates and circulation of the Latin American newspapers. Nothing of this kind has been attempted or published before, and it will satisfy a long existing want. The average American business man has but a meager conception of the large number of newspapers in Latin American cities which have a wide circulation and which are strong influences in the development of trade. Many big dailies of the principal cities will compare most favorably in the quantity of their advertising, in the extent of their circulation, and in the columns of news published with the representative dailies of corresponding cities in the United States.

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### A NEW PAMPHLET ON THE ARGENTINE TARIFF.

It is with particular pleasure that the Director General announces the completion of the pamphlet on the Argentine tariff. This has been prepared with extreme care, and it will prove of special usefulness in promoting the trade of the United States and other countries with Argentina, whose foreign commerce is growing as rapidly, in proportion to population, as any country upon the face of the earth. The tariffs of the other Latin American countries will be published as rapidly as it is possible to compile the data. Mr. W. C. WELLS, the tariff expert of the Pan American Union, has made a special study of the meaning of the Spanish terms and has endeavored to make a translation which will be of the greatest practical value. The large number of requests for copies of this pamphlet among manufacturers and exporters not only in the United States but in Europe indicates that this new step of the Pan American Union is appreciated.

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### CORRESPONDENCE WITH LATIN AMERICA.

An impressive evidence of the growing usefulness of the Pan American Union as an international institution is shown by the growth in the



HON. H. CLAY HOWARD,

Envoy Extraordinary and Minister Plenipotentiary of the United States to Peru.

correspondence with Government officials, business men, heads of institutions, editors of newspapers, students, and travelers of Latin America, who are seeking information not only about the United States but about other countries of Latin America than their own. The number of letters received daily at the Union from the Latin American Republics is several hundred per cent greater than it was when the present administration took charge of the institution.

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### THE NEW MEXICAN HANDBOOK.

It is hoped that the Union will receive from the press in the latter part of February the new Mexican Handbook. Work has been pushed forward upon this as rapidly as possible because of the great demand for reliable information concerning that country. The compilers, however, have been handicapped to some extent by the difficulty in obtaining the very latest census statistics. As soon as these are received the book will be rushed to completion. Hundreds of requests are already on file for copies of it, indicating that it will be appreciated when ready for distribution.

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### EXCURSIONS AND GENERAL TRAVEL TO LATIN AMERICA.

On Saturday, January 21, the *Bluecher* of the Hamburg-American Steamship Company started upon its second extended excursion trip to South America. The sailing list shows a large and representative number of passengers who are looking forward with great pleasure to becoming acquainted with a part of the world which is growing more and more popular with travelers and tourists. The number of ships being used for special excursions to the countries bordering on the Caribbean and the Gulf of Mexico is larger than heretofore, while the number of persons taking advantage of this opportunity is greatly increasing. In this connection it can be noted that travel generally to Latin America is larger than it was last year, and than it has ever been before. It is significant that recently Mr. F. E. SCOTT, the principal transportation agent of Chicago, well known to travelers in all parts of the United States, started on an extended journey to Jamaica, Venezuela, Colombia, Panama, and the Central American countries. The sole purpose of this trip is to better acquaint himself with conditions there, so that he may be more fully prepared to answer the increasing number of inquiries that are coming to his office about travel to those countries and more effectively promote business of this kind.

## ACTION OF THE PITTSBURG CHAMBER OF COMMERCE.

Mr. FRANK D. LA LANNE, the energetic and well-known president of the National Board of Trade, which holds its annual sessions in the city of Washington, and convened its last meeting in January, has sent to the Director General a copy of a resolution in regard to the promotion of trade with Latin America which was adopted by the Pittsburg Chamber of Commerce, one of the principal commercial organizations of the United States. At the kind suggestion of Mr. LA LANNE, we reprint it below:

*Resolved*, That we favor the establishment of closer relations of friendship and commerce with the Latin American Republics and earnestly urge Congress to enact such measures as may promote every worthy undertaking in this direction. We heartily approve the splendid efforts of the Pan American Union to unite the peoples of both continents in perfect accord and harmonious endeavor for mutual advantage, and we record with greatest satisfaction our cordial appreciation of the magnificent and self-sacrificing labors of Hon. JOHN BARRETT, Director General of the Union, in furthering the high purposes for which it was established.

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## THE FEBRUARY NUMBER OF THE BULLETIN.

A glance at the subjects elaborated upon in this issue of the MONTHLY BULLETIN can not fail to impress one of its unusually wide scope and attractive nature. Besides the usual quota of special stories on the many points of interest throughout Latin America, it also contains several instructive articles on trade and travel in these countries. Among the articles treated are: "The Capitols of America," elaborately illustrated with views of many of the magnificent federal buildings in Latin America; another article of the interesting series on "Travel Notes in Central America;" "The Museums of the Americas," a description of the famous University and Museum of La Plata, Argentine Republic; "South American Trade Hints" and "Latin American Trade Notes," represent two carefully prepared articles, comprehensive in their treatment and containing much information of value to the exporter; "Trade and Diplomacy Between Latin America and the United States" is a reprint of an interesting paper read by Joseph Hamblen Sears, president of D. Appleton & Co., publishers, before the American Historical Association; "The Galapagos Islands," "Panama, Its Future Openings for Americans," "Guatemalan Railroad Construction," etc., etc. Under Book Notes appears an especially interesting review of Sir Clements Markham's late work, "The Incas of Peru," in addition to the general survey of current literature dealing with Latin America. Such a variety of subjects will undoubtedly prove of considerable interest to the business man, scholar, and traveler alike.



THE CAPITOL AT WASHINGTON.

The corner stone of the main building was laid by President George Washington, September 18, 1793. The imposing dome, springing from the central structure, holds a statue of Freedom, 307½ feet above the esplanade. This dome has been used as a pattern for many buildings in America.

# THE CAPITOLS OF AMERICA[a]

THE Capitol of Rome has served as a symbol for the nations of the world. The use of the old hill—the Mons Tarpeius—on which the building stood, goes back to the days of ROMULUS, who founded a shrine to JUPITER upon it, but the summit known now as the Capitoline Hill was afterwards occupied by a great triple temple dedicated to JUPITER, JUNO, and MINERVA. As far back as 509 B. C. this temple was a part of Rome and has always figured in her history. Burned and rebuilt again and again, it finally disappeared as a structure devoted to public but not necessarily to government purposes. Tradition and memory retain the word capitol, however, to signify the place of meeting of a country's elected congress.

Capitol comes from *caput*, the head, and the Capitoline Hill, the smallest of the seven hills of Rome, was at the same time a very conspicuous landmark in the city. Other cities and heads of government have since these days erected capitols, and in America, both north and south, the Republics have adopted the idea of establishing one special building in which the legislative bodies hold their sessions.

As the United States was the first republic in America, so naturally its Capitol in Washington was the first of a series of homes for national assemblies. The corner stone of the main building was laid by President WASHINGTON on September 18, 1793, and the entire building

[a] By Albert Hale of staff Pan American Union.

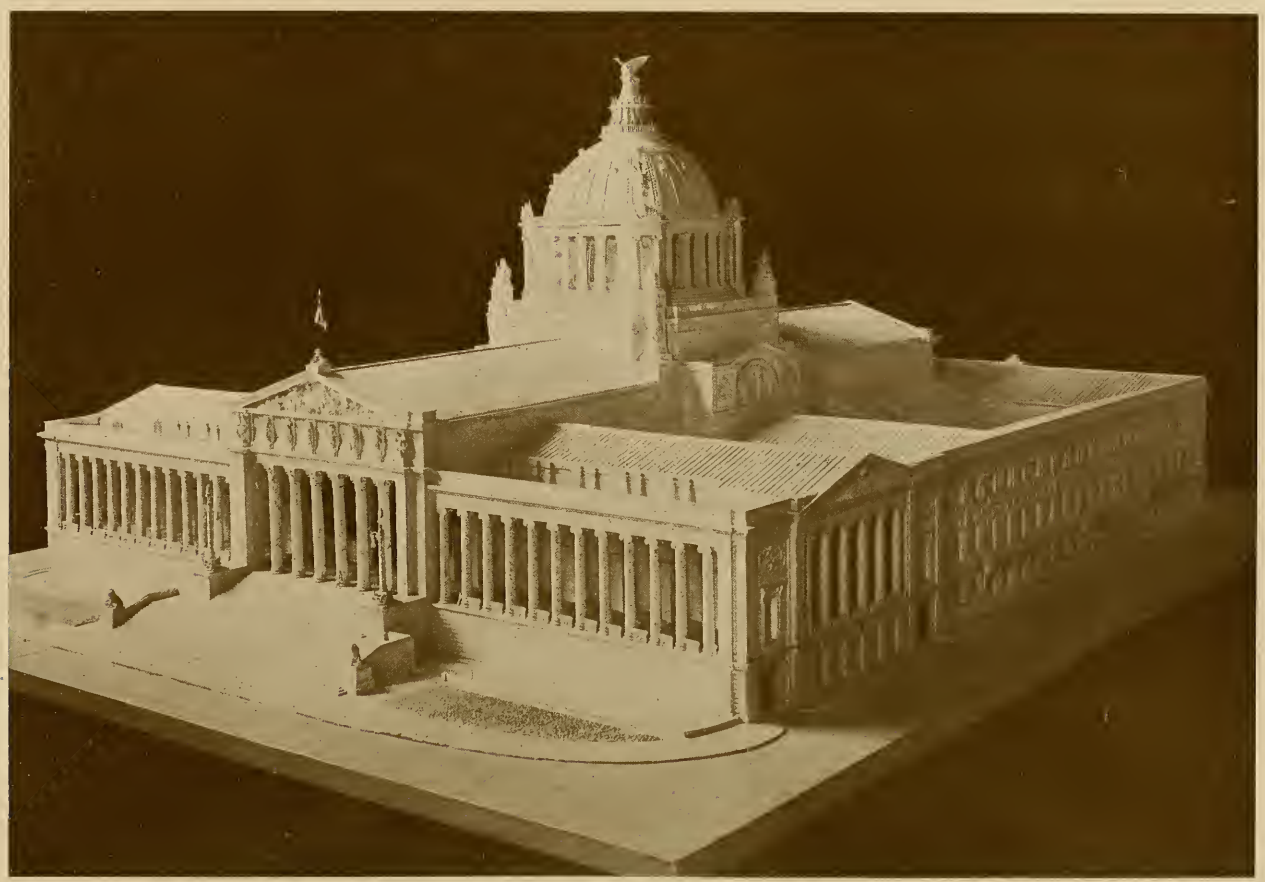
was finished in 1827. Its total length is 751 feet 4 inches (229 meters), its width 350 feet (106.68 meters), and it covers an area of 3½ acres (1.41 hectares). The crowning glory of the Capitol is the imposing dome, springing from a peristyle of fluted Corinthian columns above the central building and terminating in a lantern; above this is the statue of Freedom, towering 307½ feet (93.72 meters) above the esplanade. Both Houses of Congress meet here, the Hall of Representatives being on the south and the Senate Chamber on the north. In the northeastern section of the central structure is a room set apart for the meetings of the Supreme Court. The general style is classic, with Corinthian details, and by critics of architecture this building is ranked among the most beautiful in the world.

In the City of Mexico, the seat of the Government of the United Mexican States, is the newest of the American capitols. It is not finished yet, as the corner stone was laid September 23, 1910, so that the building is a splendid monument to the wonderful accomplishments of the nation's one hundred years of independence.

The City of Mexico has always been the capital of the country. Long before the conquest by CORTES the migrating TOLTECS and AZTECS had chosen that spot for the center of their activities, and the Spaniards wisely followed this example. The viceroys dwelt there and beautified the city through their own taste for art, which could be gratified by the material wealth so abundantly at hand in the mines and soil of the land. The Republic accepted with no changes the foundations of the centuries, but has been compelled to add to them to keep pace with the growth and importance of the nation.

At present the two branches of Congress—Senate and Chamber of Deputies—hold their sessions in separate buildings. The Senate occupies a salon of the second floor in the *Palacio Nacional* overlooking its *patio principal*, while the Chamber of Deputies is installed in what was formerly the Iturbide Theater, which has been completely remodeled for this temporary purpose.

The new Capitol in the Renaissance style will be, when completed, one of the finest buildings in the Republic, and in fact is one of the largest public buildings in construction in the world. It is located in the western part of the city on the Plaza de la Republica, a short distance from the famous Paseo de la Reforma, to which a new street will be opened, so that the vista upon it will be enhanced. The front of this legislative palace looks toward the east, but there are, on both north and south faces, commodious entrances into the central court or lobby. Work on the Capitol was begun early in 1905 and progressed but slowly, as the bad character of the subsoil rendered the preliminary excavation very difficult. The steel structure—for



THE CAPITOL IN THE CITY OF MEXICO.

As part of the celebration, in the Republic of Mexico, of the centennial anniversary of their declaration of independence, the corner stone of the new federal capitol was laid, with elaborate ceremonies, September 23, 1910. Provision is made in the building for the accommodation of both Houses of Congress. When finished, the structure will add greatly to the artistic attractions of the city.

every modern principle of construction has been availed of—commenced in April, 1910, and two of the elevations were completely erected by January 1, 1911. The material for the two remaining elevations and for the central dome are now in the hands of the contractor. The completed building will be 130 meters (426½ feet) long and 120 meters (394 feet) wide; there are to be a basement and three stories, but crowning all is a dome, in the center, the highest point of which, in so far at least as steel structural work is concerned, reaches 67 meters (220 feet) above the foundations.

Mexico has adopted the plan of distributing the national buildings in various parts of the city, rather than of attempting to group them adjacent to each other. Thus, taking the Alameda as representing the center of the metropolis, the national palace lies to the east on the famous *Plaza de la Constitucion,* near which is the municipal building, the cathedral, and other homes of culture or government; to the west, about equidistant, is the Federal Capitol just mentioned. Between these two are the offices of those departments not housed within the palace itself, so that, in an artistic sense, there is the added gain of enriching the city by the addition of these structures independent of each other.

San Salvador, the capital city of the Republic of Salvador, has, on the other hand, concentrated the working forces of the Government under one roof. This is, considering the circumstances, a wise move, because the country, although thickly populated, is small, the city itself is compact, and it is evidently an advantage to have all departments together, since the mechanism of government can never become unwieldy.

The new Palacio Nacional, which contains the offices of the Legislature—Salvador has the unicamaral system—has also those of the President and of the various executive departments. The handsome structure devoted to that purpose is situated in the center of the city and faces the Plaza Bolivar, the other three sides being fronted by substantial business or residence blocks. The architectural style is that of French and Italian Renaissance. A noteworthy feature of the construction was the adoption of the steel skeleton principle; this framework, filled with brick, was then completely faced with marble, making a body of most substantial character, and one which promises to protect the building against both fire and earthquake. Elegance, solidity, and dignity were the effects desired by the authorities in charge, and the result is indeed a satisfactory one.

On the front of the building are 112 Ionic and Corinthian columns. There are only two stories, both of generous dimensions, with a total height of 14 meters (46 feet). The legislative body, the executive's offices, and those for the various members of the cabinet, are all

located within this palace, in which, therefore, the chief forces of the Government operate.

The surface occupied by this structure is 5,715 square meters (6,835 square yards; 61,525 square feet), the dimensions being 320 feet (96 meters) by 302 feet (92 meters). Within is a patio the area of which is about 1,000 square meters (1,196 square yards), and the corridors

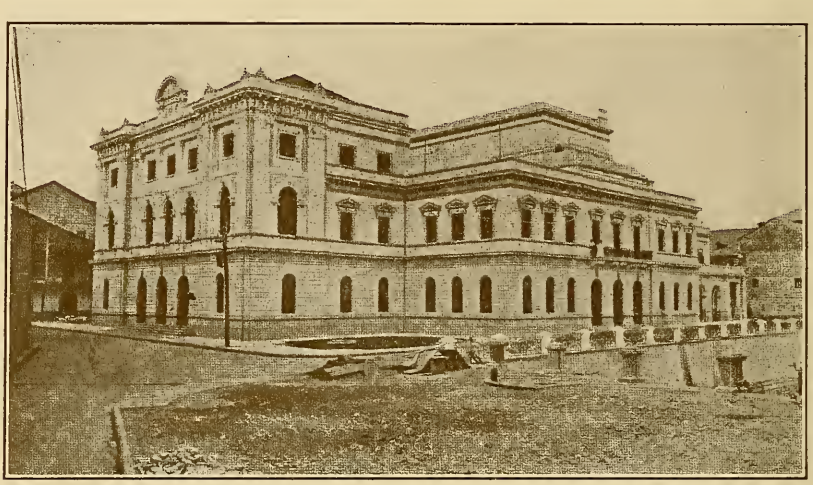


THE CAPITOL IN SAN SALVADOR, REPUBLIC OF SALVADOR.

The capitol is called also the National Palace, and is one of the most attractive of public buildings in America. Salvador has but one chamber in the legislative body, which has spacious accommodations here. Besides this arrangement, there has been reserved abundant space for other Government departments and officials. Construction was begun in 1905, and the offices were to a great extent occupied in 1910.

of both floors open onto it, the 116 rooms of the building having windows on the street. Four stairways lead from the lower to the upper floor, and from the official rooms of the President there are 12 balconies. Stairways and balconies are of marble, with iron framework, much of the stone being the product of native quarries. Construction was begun in 1905, and many of the offices were occupied early in 1910.

The Republic of Panama, midway between North and South America, has, to even greater a degree, made use of the idea of centralizing the national activities. The legislative body, like that in several of the smaller republics, is composed of one chamber only, called in this case the *Asemblea Nacional,* with the more distinctive name of Chamber of Deputies. The building in which the meetings of the Deputies is held is the *Palacio Nacional,* one of the most modern and substantial structures in the city of Panama, the capital of the Republic. In addition, there are the rooms for the offices of the President, and for the executive departments of Fomento, Justice, Foreign Relations, Treasury, and Public Instruction. But what constitutes the unique feature of the plan is the fact that the National



THE CAPITOL IN THE CITY OF PANAMA.

The Republic of Panama has, in its constitution, adopted the legislative principle of the single chamber. The *Camara de Diputados* (House of Representatives) meets in this new building, which has accommodations for several of the cabinet offices, also. In addition to the legislative and executive bodies, the structure takes in the National Theater, both buildings having been designed together, and completed together, in April, 1908.

Theater was built practically as part of the same structure. The two together occupy the same site, are of the same style of architecture—the Italian Renaissance—and were designed by one architect.

This imposing edifice was begun in November, 1905, and was completed in April, 1908. It occupies an entire square of 2,860 square meters (30,780 square feet), between the bay and the Central Plaza. It is distinguished for the elegance of its façade, the solidity of its appearance, the spaciousness of its rooms and halls, and the completeness of its furnishings. The interior woodwork is made largely from native mahogany, and in every way possible supplies from the Republic were drawn upon for both structural and decorative material.

The Argentine Republic has only last year celebrated its one hundred years of independence. From a struggling colony of Spain it has



THE CAPITOL AT BUENOS AIRES, ARGENTINE REPUBLIC.

This stately building is placed at the western end of the magnificent Avenida de Mayo. The entire edifice is devoted to the National Congress which has the two legislative factors, Senate and Chamber of Deputies. In addition to the Capitol itself, the nation has set apart, to some extent as commemorative of the centenary of independence, 1810-1910, a park in front of it, to be called the Plaza del Congreso. This will be one of the handsomest public squares in the world.

meanwhile advanced to a proud position among the great nations of the world, and the expressed ambition is to have its public buildings representative of the achievements of the century. Anticipating the event, the Government, in 1897, began the construction of the new building for the National Congress, and had it ready for partial occupancy, at least, as early as 1906, although it is not entirely (in 1910) completed, but it serves as a material monument of their progress during their life of independence.

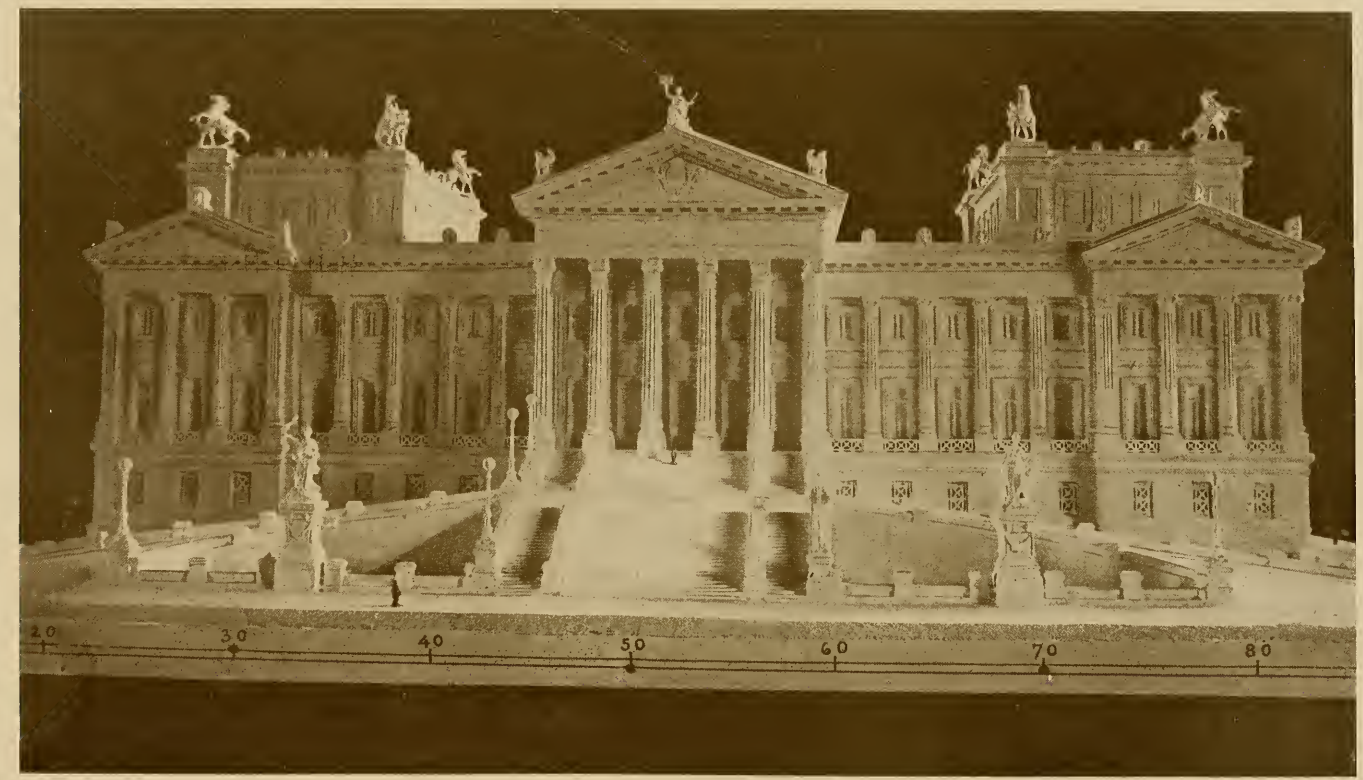
The older Government building is situated on one side of the Plaza de Mayo. From its portal a view is given of the magnificent Avenida de Mayo, which was cut through the heart of the city several years ago. At the farther end of this avenue is situated the new building called the *Congreso Nacional*, and this is the Federal Capitol, in which both houses of the legislative body hold their meetings.

*El Palacio para el Congreso* occupies an entire city block, which, according to the plans of the designers, measure 130 meters (426⅕ feet) on each side. The building lies 15 meters (49¼ feet) back of the street, so that space is allowed for an area of open parking around it. In front of the main portal is the Plaza del Congreso, one of the finest public squares in the world. The style is generally Greco-Roman, the severity of which is happily relieved by the introduction of some of the modern elements of the Italian school. There are four stories, but a lofty, slender marble dome surmounts the whole and dominates the city. In outline the structure bears a resemblance to the Capitol at Washington.

Owing to the peculiar conditions of the soil, considerable difficulty was experienced in laying the foundation, especially that of the dome, and it was necessary to construct an inverted cupola under the ground to a depth of 10 meters (33 feet) in order to sustain the tremendous weight of the superposed dome. The entire building is devoted to Congress, but there are, besides the assembly halls, suites for the President and Vice President, a Library, and other such rooms as are necessary for the conduct of correlated affairs.

The Oriental Republic of Uruguay is across the Rio de la Plata from Argentina, and the capital of the one is in close touch with that of the other. The traveler therefore always sees Montevideo a few days before or after Buenos Aires.

The new Capitol, or *Palacio Legislativo*, was designed by the same architect who created the capitol of the Argentine Republic, but has since been somewhat modified to meet local conditions, although the original principles have been preserved. The classical Greek style is maintained throughout, while numerous equestrian and other statues are used both exteriorly and interiorly for decorative effect. The entire area occupied by the building is 6,500 square meters (almost 70,000 square feet); it is situated on the Avenida Agraciada in what




THE CAPITOL AT MONTEVIDEO, URUGUAY.

The building is also named the Palacio Legislativo. It is reserved for the particular use of the national legislative bodies, the Senate and Chamber of Deputies. Other apartments are set aside, however, for the business of administration, for Cabinet Ministers, and a Library. There is also a grand reception room (Salon de Fiestas), in which public receptions will be held. The corner stone was laid by President Batlle in 1906, and will soon be ready for occupancy.

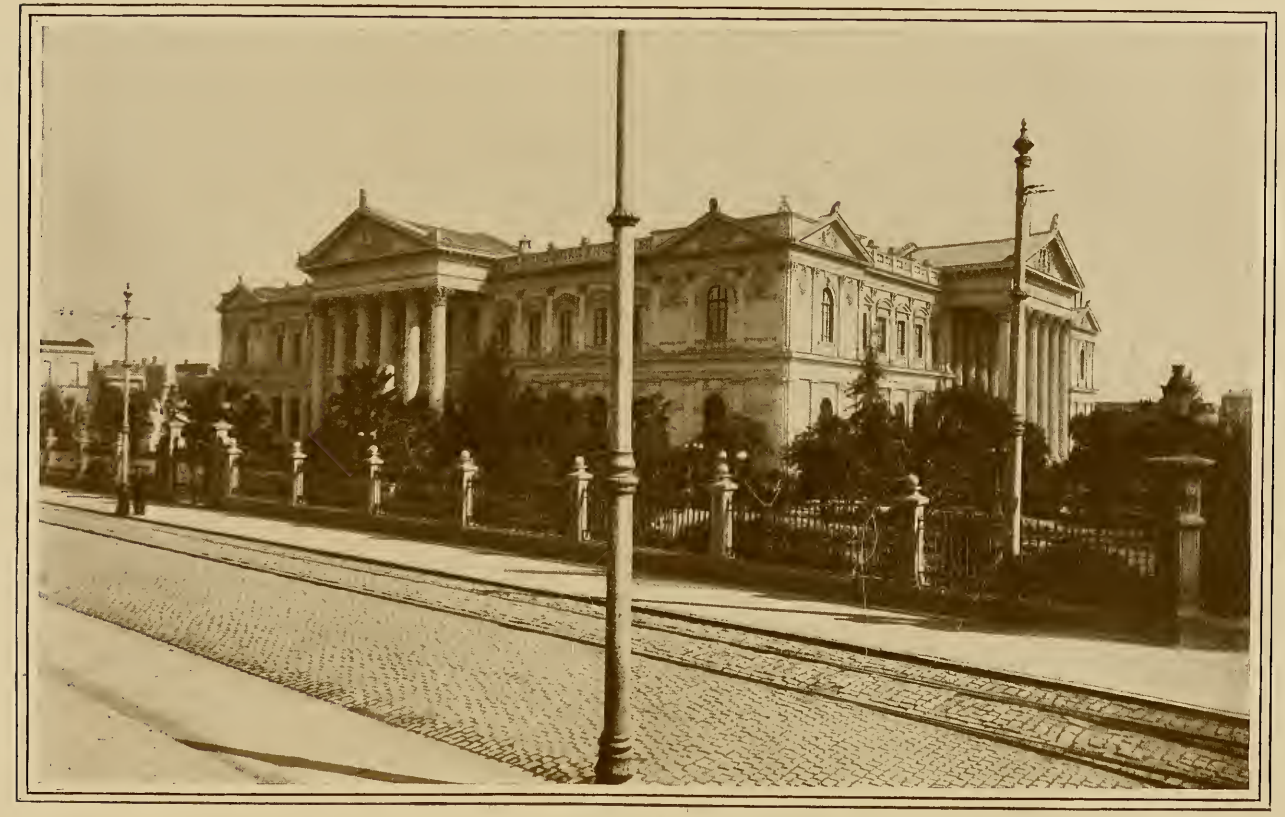
was formerly the Plaza General Flores, to which considerable adjacent territory was added, so that space for a surrounding park, which enhances the beauty of the capitol, has been retained.

There are in all three stories and a basement, the latter being occupied by the necessary machinery for operation of a modern structure, and fireproof storage rooms for the archives. The first floor contains a large vestibule, 17 meters (56 feet) in width, and three smaller parallel vestibules; the first gives access to a handsome marble staircase of the same width divided into three parts by handsome pedestals sustaining bronze statues. On this floor are also suites for the capitol officials, police, telegraph and telephone forces, and accommodations for the public. The second floor has the large halls for the Senate and the Chamber of Deputies. There are also rooms for the Cabinet Ministers and a *Salon Presidencial* reserved for the President of the Republic. On this floor are located also a *salon de fiestas* (grand reception room), a library, and other apartments for congressional use. The third floor is set apart for various committees of the two legislative bodies and for general routine work. On a mezzanine floor between the second and third are galleries for the press, visitors, and the public. Eight large staircases and eight elevators facilitate transit within the building.

The work was supervised by a legislative committee, of which the President of the Republic was chairman *ex-officio*, assisted by prominent architects and engineers of Uruguay. It is estimated that the building will be ready for occupancy by the end of this year (1911), although the interior decorations and furnishings will probably require more time. A notable fact in connection with the structure is that the necessary funds have been provided by the Government out of the surplus of the budget, and that therefore no bonds have been issued for the purpose.

Santiago, the capital of the Republic of Chile, is one of the most beautifully situated cities in the world and is the third largest city in South America. It has been the seat of government since the earliest occupation of the country, and gives every promise of increasing its importance even as a great commercial center of the west coast of the Continent.

The National Congress, which is composed of two houses—a Senate and a Chamber of Deputies—hold their sessions in a capitol which, although not erected so recently as those already mentioned, yet possesses several features of construction always treated with great respect by modern schools of architecture. It is a magnificent building, rectangular in shape, measuring 76 meters by 78 meters (250 feet by 256 feet), and surrounded by a pretty park. It was begun in 1858 and inaugurated in 1875.



THE CAPITOL AT SANTIAGO, CHILE.

This is one of the most substantial buildings in the Republic. In it both Houses of Congress have their meetings. Construction was begun in 1858 and was finished in 1875, when inaguration ceremonies were held. In a city noted for its architecture, the Capitol is still considered as one of the most beautiful buildings.

Lima, in Peru, founded by PIZARRO in the year 1535, is the capital of the Republic, and at the same time the city of most importance in the country. It has always been famous for the architectural beauty of the buildings, for here the Spanish style attained its greatest flower, and the modifications induced by the western environment showed here their greatest characteristics.

The National Congress has thought it wisest to occupy two of these famous buildings for the legislative bodies, the Senate and the Chamber of Deputies, and therefore a third kind of capitol may be noted in Latin America. The Senate holds its sessions in a building formerly used by the Tribunal of the Inquisition, although it has been completely remodeled and redecorated to meet the present requirements. The Chamber of Deputies is housed in what was once the Chapel of the University of San Marcos, likewise rearranged for that particular purpose. The two buildings are situated on the *Plaza de la Constitucion* (formerly the Plaza de la Inquisicion), one of the many handsome public squares of Lima, in which is a superbly sculptured statue of BOLIVAR.

A new building for Congress has been contemplated for some time past, and the Government has had under consideration various plans to further their desire to obtain a capitol worthy of the Republic. The latest decision is to submit to open competition the designs for the new structure, so that the best talent of the world may be drawn into the prize contest.

Caracas is the seat in Venezuela of the Federal Government, and has a capitol which attracts the notice of visitors for two reasons: Its architectural style is the Doric—that of the Federal Palace adjacent to it being Corinthian—and in itself is a dignified structure in every sense, but its striking feature is the *patio*, through which all Caracas passes at some hour during the day and even far into the night. This patio is peculiarly Spanish, so that with the fountain and the tropical plants growing so luxuriantly there it is always a delight to those who have the pleasure of lingering in it. Then, again, the capitol is remembered from the fact that it was built in 1873 within ninety days, an exhibition of industrial activity of which the Venezuelans are justly proud.

The two buildings together occupy a space of 8,500 square meters (10,166 square yards, 91,494 square feet). The capitol proper has halls for the Senate and the Chamber of Deputies besides offices for several of the highest public officials. The Federal Palace, although distinct from the other building, is intimately associated with it and is in reality part of the same structure. This is crowned by a dome or cupola of handsome proportions. Within is a spacious hall known as the *salon eliptico*, 48 meters by 13 meters (158 feet by 43 feet), adorned with portraits of patriots who fought in the war of




THE CAPITOL AT CARACAS, VENEZUELA.

The edifice covers an area of 1½ acres in the center of Caracas, and its lovely patio is visited during the day by many of the inhabitants of the city. The architecture of the building is a combination of the Moorish and Spanish styles, and seems particularly well fitted to the semitropical climate of the valley in which Caracas lies.

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independence. The ceiling has several battle scenes on a gigantic scale. The floor is a mosaic, made of native woods.

In La Paz, Bolivia, is one of the newest Capitol buildings in Latin America. Sucre has long been the official seat of government, although custom and convenience has established the working forces of the Republic in the more accessible city. In order, however, to provide a home for the National Congress, which consists of two bodies, the Senate and the Chamber of Deputies, the imposing Capitol has been placed in La Paz. There are two lofty stories, above which the tower rises to a commanding height; the first floor is used for the offices of the President, and the second is devoted to the halls in which the two legislative bodies hold their sessions.

Bogota, the capital of the Republic of Colombia, is one of the oldest cities in America, and lies very near the original head settlement of the prehistoric Kingdom of the Chibchas. The Capitol here, situated on the principal square called the Plaza de Bolivar, is an imposing and well proportioned building of white granite, held throughout in the Greco-Roman style. It is still unfinished in some details, but is considered one of the handsomest structures in the country.

Paraguay has always maintained the seat of government in Asuncion, on the Paraguay River. The National Congress is composed of two bodies, the Senate and the Chamber of Deputies, which have their home in the *palacio legislativo,* but the *palacio de gobierno* is a handsome structure, adhering closely to the modern Italian renaissance of architecture.

In Ecuador the capital city is Quito, well known before the conquest as one of the chief centers of the native dynasty, a part of the ancient Inca Kingdom. The *palacio de gobierno,* that is, the Capitol of the Government, houses the National Congress, as well as the offices of the President and other executive departments. It is a pleasing but modest building, of two stories only, in accordance with the usual structural character of the country, built in Corinthian style, with numerous columns forming the first story, and a balcony. Congress has the two bodies, the Senate and the Chamber of Deputies. In front of the Capitol is the beautiful Plaza Mayor, adorned, like all parks in Latin America, with statues and a fountain, and used as a popular meeting place by all classes of the people.

The United States of Brazil, the official name of the Republic, has a unique position among the American nations. The early capital of the country was Bahia (São Salvador). In 1762 the Government was transferred to Rio de Janeiro, when it was a viceroyalty, and was retained there under the Empire. When the constitution of 1891 was adopted and the Republic had thereby expressed the voice of the people, although Rio de Janeiro was not repudiated as the active head of the nation, yet Article 3 of Title I expressly provides for the



THE CAPITOL AT LA PAZ, BOLIVIA.

This new legislative palace is situated in front of the principal square of the city. The two bodies, Senate and Chamber of Deputies, are commodiously housed here, but various suites are set aside for the President and for other purposes intimately connected with the routine work of Congress. The lofty tower is fast becoming one of the landmarks of the city.

establishment in the central plateau of the Republic of a special zone to be the future Federal Capital.

For that reason the City of Rio de Janeiro has no Capitol, in the strict sense of the word, for the National Congress. The bicamaral system is that adopted by the constitution, and therefore a Senate and a Chamber of Deputies form the legislative body, but each meets in a building apart from the other. They are of no great architectural beauty, but are substantial and for the present serve their purpose. Historically, however, both buildings are of interest, the one occupied by the Chamber of Deputies having once been a prison, and from it the great Brazilian apostle and martyr to liberty, TIRADENTES, was led to execution.

Consequently the matter of a national capital is unsettled. The State of Goyaz, where the indicated plateau is located, is the most central State of the Republic; it is bounded by 6 other States, and has a delightful climate and salubrious and picturesque surroundings. There is no doubt but that in time, when railway extension, now being so rapidly pushed in Brazil, has reached and crossed Goyaz, the accessibility of the site will be quite as favorable as that of many European or American capitals. The future capital will therefore be erected on analogous lines to the city of Washington. Already plans have been offered to the Brazilian Government for the practical completion of the scheme, but decisive action has not been taken.

Of the remaining nations it can not be said that they have capitols in the strictest sense of the word. The island Republics—Cuba, Dominican Republic, and Haiti—are each governed by a Senate and a Chamber of Deputies (equal to the House of Representatives), while those of Central America have adopted the unicamaral system, the National Assembly being called a Congress, a Legislature, or a Chamber of Deputies, as custom may dictate. Each Government has, of course, a building or buildings in which the legislative body holds its sessions, but they all offer accommodation for other departments of national activity, such as the offices of Cabinet Ministers, or those whose duties are of national character. As these nations grow, and as the demands for governmental activity call for more and more space, all will provide their Congresses with structures set apart for one exclusive purpose, and the additions thus made, which are sure to follow the artistic impulses of the Latin spirit, may then be grouped in the series of structures under Capitols of Latin America.



THE CAPITOL AT ASUNCION, PARAGUAY.

The National Congress of the Republic of Paraguay is composed of the two bodies, Senate and Chamber of Deputies. The modern Italian Renaissance style is the principal feature of the architecture of the building.

# THE GALAPAGOS ISLANDS[a]

THE completion of the Panama Canal will bring the Galapagos Islands into the limelight of the world stage. In almost a straight line and half way from Southampton to Sidney, their future maritime importance can not be exaggerated. To get a clearer idea of what the opening of the isthmian waterway means to this archipelago, take your atlas of the world and measure off a scale distance of about 600 miles from the




AT THE CROSSROADS OF COMMERCE.

When the Panama Canal is opened the Galapagos Islands will be in the track of the steamers of the world.

west coast of Ecuador on the equator, and you will discover the islands. In this you will be more fortunate than some of the early Spanish navigators, who christened them the "enchanted isles," because they were supposed to appear and disappear between voyages. We now know that their apparent unstability was due to the defective nautical instruments of those early days and not to any physical phe-

[a] By Granville Fortescue of staff Pan American Union.

nomenon. You will see at a glance that the islands, about two days run from Panama, stand in the same relation to the Pacific entrance of the Canal that the West Indies does to its Atlantic gateway. It will also be noticed that they are a little more than half way on the trade route from San Francisco to Valparaiso.

It needs no prophet to foresee that the now almost unknown archipelago will soon be a port of call for the steamships of the world and their position be likened in some degree to that of the Hawaiian group in the northern Pacific. The settlement on Chatham Island will be changed from the status of a penal colony to that of a commercial center.

The rapidly increasing trade between the west coast of South America and Japan brings these islands in the pathways of the mercantile vessels of the latter country.

The following table gives the distances of the Galapagos Islands from the principal ports of the world:

| Chatham Island to— | Miles. | Chatham Island to— | Miles. |
|---|---|---|---|
| San Francisco | 2,990 | Auckland | 5,900 |
| Acapulco | 1,230 | Sydney | 7,100 |
| Panama | 840 | Ecuadorian coast, nearest point | 530 |
| Payta | 570 | Guayaquil | 620 |
| Callao | 1,010 | Honolulu | 4,600 |
| Valparaiso | 2,190 | Yokohama | 7,990 |
| Lota | 2,430 | Southampton | 5,450 |

This group is remarkable in many ways and the story of the isles from the prehistoric period when nature in the throes of some great agony threw them up from the bed of the Pacific, to the time of their discovery and occupation by man, holds much of interest.

Nothing is known definitely of the date when the islands came into being, except that they were of a distinctly later appearance than the mountains of the South American mainland. Unique from a geological point of view, DARWIN, who visited the islands in 1835–6, evolved a curious theory to account for the peculiar formation of the 2,000 or more craters that make up the group. This scientist was convinced that the volcanic protuberances appeared slowly above the surface of the sea in the fashion of boiling mud bubbles rising gradually to their present heights and in the process being broken down on the southeast side by the action of the waves, thus explaining the uniform opening of the craters. Later investigators account for this curious characteristic of the volcanic basins in a much more prosaic way, contending that the islands are of the usual igneous formation and that the action of the elements, an almost constant trade wind, with occasional rains, have in time torn down the lava walls all to the windward side. Volcanically, the mountains of the Galapagos are no relation to the sierras of South America, but belong to the igneous



Courtesy of New York Zoological Society.

TESTUDO MICROPHES AT HOME.

The remarkable turtle, found nowhere else on the globe, that gives its Spanish name, "Galapago," to the Archipelago.

range of Panama, being all that is visible above sea level of a system of submarine hills running from Veragua, a province of the Isthmian Republic, in the direction of the islands of Coiba, Cocos, and Culpepper, the latter the most northern of the Galapagos group. Some scientists think them the remains of a now sunken continent. Owing to the isolation of the islands, there is no authentic record of active eruptions, but we know that as far back as 1735 volcanic disturbances were noticed, while in 1814 and 1825 English skippers reported the craters active, and as late as 1907 a new opening appeared on James Island, from which a torrent of lava flowed to the sea.

The archipelago consists of 15 larger islands and about 40 smaller, with a total area variously estimated at from 2,400 to 3,000 square miles, included between latitude 0° 38′ N. and 1° 27′ S. and longitude 89° 16′ 30″ W. and 91° 40′ 45″ W. Culpeper and Wenman Isles lie outside of this radius to the north. The most important in area



THE SHORES OF THE "ENCHANTED ISLES."

The desolation of the shore line seemed to the early Spanish navigators to shroud some mystery, and sometimes they circled the islands in their ships for days before attempting a landing.

are Albemarle, Indefatigable, Narborough, Chatham, James, and Charles. Other islands are Hood, Bindloe, Abingdon, Barrington, Tower, Duncan, Jarvis, Brattle, Culpeper, and Wenman. These names are the more common ones, but they are no longer official, as the Republic of Ecuador renamed the archipelago, in 1892, "Colon," in honor of COLUMBUS, at the same time changing the nomenclature of each distinct island as follows:

Albemarle: Isabella.
Indefatigable: Infatiguable, Tierra de Valdez, Duke of Norfolk, Santa Cruz, Santiago.
Narborough: Fernandina.
James: Santiago, San Salvador, Tierra de Gil.
Chatham: Grande, San Cristobal.
Charles: Mascarin, Floreana, Santa Maria.
Hood: Española.
Bindloe: Marchena, Torreos.
Abingdon: Pinta, Geraldino.
Tower: Genovesa.
Culpeper: Jervis, Rabida, Guerra.
Wenman: Nuñez, Gasna.
Barrington: Santa Fe.
Duncan: Pinzon.
Islote Redondo: Rocca Redonda.

The same uncertainty that clouds the history of the pristine geologic appearance of this archipelago holds with the records of the date of its discovery by man and the first stories of the islands come to us in a most roundabout fashion. Letters of sailors and priests sent from Peru in the period following the conquest tell of the possible earlier discovery of at least two of the islands. An ancient Incan legend would lead one to believe that the archipelago was known to the Kings of Quito, having been discovered by the Incan Tupac Yupanqui, who, according to their traditions, made a voyage of discovery on the Pacific during which he fell in with the two islands (Fire and Seaward). A modern writer attempts to identify



BANKED FIRES.

On two of the islands of the Galapagos Group smoke issuing from craterside fissures testify to their volcanic origin.

these as the Isles Chatham and Hood of our day. The voyage lasted more than a year, and when the seafaring Inca returned to Cuzco, the capital of his kingdom, he brought as trophies a "throne of copper, numerous negro prisoners, and skins of animals like unto horses" (otaria jubata?). It would be interesting to know just what countries the daring Peruvian voyager did visit where he found the throne, the negoes, and the skins, as they are all foreign to the west coast of South America, especially the negro. Certainly he did not capture these latter in any Galapagean island. That the group was known to the Quichuas, however, is probable. These people were great fishermen, using large, well-constructed sailing rafts in the quest for

sea food, so it is easily possible, especially when we consider the relation of the antarctic current to the isles, that some of their craft found the way to what we now call the Galapagos Islands. Leaving the question of Quichua discovery perhaps forever undetermined, we do know that THOMAS DE BERLANGA, third bishop of Panama, was the first European to sight the Galapagos, on the 10th of March, 1535. This exploring prelate is also credited with being responsible for the introduction of bananas into the Western Continent.

His discovery of the Galapagos Islands was quite accidental and came about during a voyage from Panama to Peru, whither he had been sent to report on the doings of PIZARRO, for the worthy bishop enjoyed the confidence of his King. According to his letters, the prelate left Panama on the 23d of February, 1535, laying a course for Inca land. All went well until the 1st of March, when the ship ran into calm weather, and was drawn at the mercy of the currents for eight days, at the end of which time the watch descried land, which was a welcome sight, as little water remained in the casks. Bishop BERLANGA and his crew were doomed to disappointment in their search for water on this island; so, after in a measure satisfying their thirst with tunas (prickly pears), they left the turtles in possession of its desolate shores and sought elsewhere.

Fortunately, a few days later (Passion Sunday), they landed on another island, larger and of more inviting aspect than the first, and here, after first solemnizing mass in honor of the day, their efforts in search of springs were rewarded by the finding of a plentiful supply of water.

It must have been a picturesque ceremony—the celebration of the sacrament of the mass on these desolate shores. Picture a rough cross, sheared up from a pile of lava rock, the bishop-captain bowed before it, his hard, drawn face and grizzled beard just showing above the gold and purple chasuble; as acolyte some gaunt prototype of Don QUIXOTE chanting the responses in a rough, deep bass, while the ship's company, a motley band of soldiers in queer helmets, leather jerkins, with long Toledo blades on hip, and sailors, more than half pirates in dress and hopes, knelt in strong devotion and perfect faith, the great turtles, huge black lizards, and fearless birds watching curiously the thirst-racked and famine-worn humans who thus disturbed their haunts. Indeed, the spirit of the Cross was strong within the early conquerors.

The good bishop was a scientist as well as a churchman, and he determined the exact latitude and longitude of the archipelago; but he gave no name to the group, and after a stay of ten days turned the prow of his ship toward Peru. From the data available it would seem that BERLANGA landed first at Barrington Island, passed Charles, and found water on Chatham Isle, where he also discovered what at

first seemed diamonds and amber. He gives little account of the flora and fauna, but makes reference to that fact afterwards, often verified, that the indigenous birds did not take flight at the approach of man, but allowed themselves to be taken by hand.

After Bishop Berlanga left the islands their existence was again ignored, and they remained almost forgotten for a space of eleven years, when Diego de Rivadeneira, who, in carrying on war against the constituted authority at the time, was compelled to put to sea without chart or compass. He arrived at Albemarle and found time to study the fauna to some extent, and described one of the most remarkable forms of bird life peculiar to the island. This was the beautiful gerfalcon (*Craxirex galapagoensis*), a bird of prey that lived off the young of the land turtles, thus being the first element that has brought about the almost total extinction of the testudo, that remarkable reptile found nowhere else on the surface of the earth.

Rivadeneira also left the group nameless, but after arriving safely at Acapulco and making his peace with the powers that were, his discovery was made known to the King of Spain, and he was recommended for the post of governor of the islands, a position he never filled, however. The archipelago now was well known to the Spanish mariners, and for reasons already suggested were called the Enchanted Isles. Ortelius, however, in his map of America and the South Sea, published in 1570, indicated the group under the name Galapagos, which designation it has held ever since. Ambrose Cowley, a sea rover of the seventeenth century, gave the islands individual names, some of which hold to this day. The group became the rendezvous of the pirates who ravaged the west coast about the end of the seventeenth and eighteenth centuries. They laid in supplies of rum and flour on these convenient isles and used them as a base for planning and fitting out numerous marauding expeditions.

The South Pacific whalers also made port in the islands and early reported them as most satisfactory fishing grounds, a distinction they still enjoy. Near the end of the eighteenth century, to be exact, in 1793, the Viceroy of Peru ordered a survey of the archipelago made, as it was part of his domains, and Alonso de Torres carried out his orders.

A copy of Torres's map was found in the archives of the hydrographic office in Spain in 1891, but it is quite imperfect and of little value geographically, however most interesting historically.

During the period of revolution against Spanish authority in South America the islands were much used by the privateers that preyed on Spanish commerce, being visited by those two active Argentine corsairs, Buchard and Brown, who came to divide their booty and settle a difference that had arisen between them. With the fall of Spanish power the isles were in a measure forgotten and these deso-



Courtesy of New York Zoological Society.

THE CAPTIVES.

The slow movements of the Galapagos turtle make it very easy to capture, and scientific societies have sent expeditions down to this island in order to obtain specimens.

late shores were only touched by an occasional whaler or some circumnavigating sailor, the archipelago actually remaining no man's land until February 12, 1832, when the Ecuadorean Government formally took possession of the group. It is curious to note that this act of occupation was inspired by a North American, a Louisianian named VILLAMIL, who left his native territory when it came under the jurisdiction of the United States. This gentleman had gained certain distinction in the Ecuadorean army during the wars against Spain, bearing the title of general.

General VILLAMIL entered on a plan of colonization with great enthusiasm. He obtained a concession from the Ecuadorean Government in recognition for his having brought the islands to the notice of the officials of this Republic. He induced some of the younger men of the best families of Guayaquil to accompany him to Charles Island, where he established the Society for the Colonization of the Archipelago of the Galapagos. He imported cattle, horses, donkeys, sheep, goats, dogs, cats, pigs, and chickens, which were distributed throughout several of the larger islands, and he immediately began the cultivation of potatoes, beans, corn, and household vegetables. Afterwards he took up the extensive cultivation of sugar cane and citrus fruits, coffee, and other products suitable to the climate. His enterprise met with great success at first, and every thing pointed to a prosperous and happy future for this self-exiled band of modern ROBINSON CRUSOES.

Trade was established with the different whalers that frequented these oceans, and the colony began the export of turtle oil, which was a source of considerable revenue.

Unfortunately the originator of the scheme soon lost interest in the affairs of the colony, and this, combined with the fact that the Ecuadorean Government found the islands a suitable place for use as a dumping ground for undesirable citizens, and a constantly diminishing trade between the group and the main coast, due to various circumstances, caused the original colonizers to become discouraged. The undesirable element became an extremely disturbing factor, dissensions were rife, and assassination frequent, until finally in 1851 the once happy settlement of 250 people had dwindled to a colony of 13, consisting of a governor and 4 minor officials and 8 criminals. During an absence of the authorities, the criminals took possession of a visiting American whaler, murdered the crew, followed the governor to Albemarle Island, whither he had gone, murdered him, and thence proceeded to the coast of Ecuador, where they fell in with another ship which they assaulted, overpowering the crew, and put 29 defenseless people to the sword. Fortunately this band of pirates was shortly afterwards captured and met the fate that their crimes merited.



Courtesy of New York Zoological Society.

A HALT AT THE SPRING.

Turtle hunters transporting dead specimens of the testudo on the backs of donkeys that are found running wild on severa of the islands.

During the time that VILLAMIL was governor of the islands they were visited by the famous scientist, CHARLES DARWIN, who stopped at Chatham Island in 1835. The record of this visit will be found in "The Voyage of the *Beagle*," a book which CHARLES ELLIOTT designated as one of the Harvard classics. The observations of this famous scientist are extremely interesting, especially in view of the fact that it is sometimes stated that the study of the geology, flora, and fauna of this archipelago served as the inspiration of his wonderful work, "The Origin of Species." He has given the islands a unique place in biological studies, describing the archipelago in a most apt



THE LAVA LEVEL, GALAPAGOS ISLANDS, ECUADOR.

The lower level of lava, in the geologic formation of the islands of the Galapagos, gives no foreknowledge of the existence of the fertile highlands.

phrase, as "a little world within itself." He uses this term of descriptive nomenclature because on these islands he found certain animal and vegetable species that existed in no other part of the known world.

It is unfortunate that DARWIN was not able to spend more time in the islands, and it would seem that certain of his conclusions were influenced by the fact that he visited the group during the dry season, and any one familiar with conditions in tropical countries would easily understand how the appearance of the country would be entirely changed after the rains.

DARWIN and subsequent investigators were all struck by the fact of the peculiar appearance of the islands, the visible surface of the ground being studded with the remains of innumerable extinct craters, which one writer describes as recalling the flesh of a person who has suffered severely from smallpox. The islands may be said to be a graphic study in geology, or, perhaps more accurately, an object lesson in the effect of climates. For the first 600 feet, approximately, of elevation, there is nothing save a desolate waste of acres of lava rocks, over which crawl numbers of huge lizards and gigantic turtles, recalling vividly some possible antediluvian landscape. From 600 to 800 feet there will be found stunted vegetable growth, while above the latter altitude the process of disintegration has gone on whereby a fertile soil has been brought into being, and the whole shows a country of hillock and meadow land that comes as a delightful surprise to the beholder, after the desolation of the lower levels. The summits vary in height from 1,600 to 3,700 feet, and on some of the islands are found craters extending 4 or 5 miles across. The valleys of these craters form extensive meadows wherein thousand of cattle, known to be descendants of the original importation in 1832, now browse, molested only by the modern hide exporter and the offspring of the first dogs brought over by VILLAMIL.

The sea currents in the vicinity of these islands merit notice. It would seem that the great HUMBOLDT, current running toward the west and northwest, meets the Central American water sweep, thus forming a whirlpool at this point. The speed of the current reaches the figure of 2½ miles an hour.

The difference in the temperature of the sea is remarkable here. On one side of Albemarle Island a foot below the surface, 80° F. was reported, while on the other side, the temperature was found to be less than 60° F. These currents and the trade winds combine to give the islands a delightful climate, in spite of the fact that they are crossed by the Equator, and during certain seasons of the year it is said that nowhere can you find weather conditions more healthful or agreeable. In the higher parts of that section capable of extensive cultivation the climate is comparable to the Hawaiian Islands. The rainy season provides an abundance of water, which collects in the craters and fissures of the volcanic formations, where it remains during part of the dry season. The lower levels, however, are arid during most of the year. The average temperature is 72° F., although during the season of calm it will be found much hotter on the leeward side of the islands.

As already stated, the indigenous animal life of the archipelago is in its way perhaps the most interesting in the world. When DARWIN first visited the islands he determined 26 distinct species of land birds, 25 of which were found nowhere else in the world, and since

that time other naturalists, who have studied this feature, claim that there are 58 peculiar species, and possibly more. DARWIN puts forward the hypothesis that all of these are descended from a single species, having been modified in form and color during the course of ages.

Of the reptiles the most interesting are the turtles and lizards. The former, the Galapagos, are found nowhere else, and at one time literally swarmed over the islands. They were huge, measuring sometimes 3 feet from the breast shell to the dome of the back; slow of movement, making about 4 miles a day when walking; long, thin



A CRATER BAY.

The seas that surround the archipelago are ever smooth.

necks and curiously small heads and broad flat flappers; their whole appearance suggesting some dwarfed descendant of the Pleistocene age. Some specimens weighed as much as 600 pounds, but these giants are very rare nowadays. An expedition that sailed from San Francisco with the special object of getting specimens of the Galapagos turtle, after considerable difficulty could only find a few weighing 40 or 50 pounds. Formerly, cruisers or ships that stopped at the island had no difficulty in killing great numbers of these reptiles, but latterly a combination of circumstances are working for their complete extinction.

The turtles yield a peculiar quality of oil that can be used in place of lard. The medium-sized ones contain from 5 to 6 gallons of this product, worth about 75 cents gold per gallon, and as it is a very simple matter to extract the oil, it is easily seen how the turtle hunters would pursue their calling until they had completely exterminated this remarkable reptile.

The dogs that roam the islands have also contributed to the destruction of the turtles, and their method of attack merits description. Upon the approach of a pack, the reptile withdraws within his shell, then the dogs sit patiently in a circle around him until returning confidence prompts the tortoise to put out a claw. The dogs seize it, and in the resultant struggle they get a hold on his other members. Then it is only a question of time when the dogs are sure of their meal.

In connection with these turtles, a peculiar roughened condition of the back of the shell on some of the larger ones is responsible for the hypothesis that they are of almost incalculable age. It was thought that this roughened condition was due to the falling of lava on their backs, thrown out in the first eruptions.

The lizards are of two kinds, the land and marine lizard, the latter (*Amblyrhyncus crustatus*) being the last surviving species of a genus widely dispersed in the Mesozoic age. The study of the habits of this reptile afforded DARWIN much enlightenment as well as entertainment, for in his book, "The Voyage of the *Beagle*," he describes how he plagued them with a stick, started a fight between two specimens, and otherwise amused himself at the expense of this degenerate descendant of a prehistoric age.

The islands are seal rookeries of considerable importance, and it is possible that the skin "resembling that of a horse," which the Spaniards speak of as being one of the trophies of YUPAC TUPANQUY, the Incan king, was perhaps a seal pelt. As giving an idea of the extent of this industry, it is known that at one time a firm in Callao took 10,000 sealskins annually from the archipelago. Some of the seals of the *Otaria jubata* species frequently grow to the size of a bull, but there is also a smaller species which is generally found about 5 or 6 feet long.

The plants of the islands are even more remarkable in their way than the animals. In the study of botany 190 species have been found indigenous to the Galapagos. Perhaps the best known of all the plants is the orchilla weed (*Rocella tinctoria*), commonly known as dyers' moss. This weed finds it value from the fact that before the discovery of analine dyes it formed the basis for the manufacture of certain tints. At one time it brought a price of $5 to $6 per pound in the market, and the gathering of orchilla was a very profitable commercial undertaking. The fact that this plant was found in great abundance on the middle levels of the islands led to a second

and also disastrous attempt at colonization. One VALDIZAN obtained a concession from the Ecuadorean Government for the exclusive collection of all the orchilla in the Galapagos group. In putting his concession into effect he tried to establish a colony on the islands, but after a precarious existence for a number of years the colonists assassinated VALDIZAN and made their way back to the mainland.

All those who have studied flora and fauna in the group have been struck with the fact that the former, instead of being representative of what they expected to find in a tropical island, was more of that class of botany encountered in the highlands of the Andes. The vegetation here found at 1,000 feet having much in common with that growing at 10,000 feet elevation on the mountains of the main-



THE HIDE HUNTERS.

The wild cattle of Albemarle Island are hunted for their hides, being a considerable source of income for the concessionaire.

land. In truth, there is nothing about the islands to convey an idea that they are in the most tropical of all tropical latitudes, directly under the Equator.

The fishing grounds of the group have been famous for years up and down the west coast, codfish being especially numerous in this vicinity, while lobsters without claws and oysters are found on the rocks surrounding the islands.

As a fish story, the experience of the owner of an auxiliary launch, who recently made a cruise throughout the islands, is given. This gentleman sets forth that he caught 50 codfish on a line, averaging 12 pounds, the largest weighing 18 pounds. in less than an hour.



Courtesy of New York Zoological Society.

THE HAVOC OF THE OIL HUNTERS.

The Galapagos turtle is especially valuable for a quality of oil that is extracted from one of its organs, and those who exploit this oil commercially are rapidly bringing about the extinction of these turtles.

That is about 1 fish a minute, which would seem to be about all the most exacting follower of ISAAC WALTON could wish.

There are large accumulations of salt throughout the various islands, so the proposition for the establishment of plants for the catching and salting of fish would seem to hold out hopes of considerable success.

That the islands are of economic value is clearly established, but if any doubt remains of this point, it should be dispelled by a realization of what the last colonizer accomplished. A man named MANUEL J. COBOS established a hacienda and began the cultivation of sugar cane. He was not neglectful of other agricultural and horticultural opportunities, for in addition to his sugar cane he planted all



WHERE "ORCHILLA" GROWS.

Orchilla (*Roccella tinctoria*), commonly known as dyers moss, is the base of certain dyes and also of litmus. It is also used in tinting the fluid of spirit thermometers.

characters of vegetables and fruits, most of which prospered exceedingly. In fact, his "Centro del Progreso," which was the name of his sugar mill, rapidly increased in value, and in a few years a barren section of land of no value was transformed into a prosperous sugar plantation which could have been easily disposed of for $150,000. COBOS was sometimes called the "King of the Galapagos Islands," and it is feared that he exercised his power after the manner of the despot. He was the supreme authority, and in a number of cases inflicted the death penalty, which he sometimes varied by a sentence of exile, the adjacent islands being found eminently convenient as a place to which he could send such persons whom he judged merited

this character of punishment. He also found it convenient to establish his own bank, and issued paper and metal currency with which he paid his laborers. The advantages of this plan are self-evident.

The Ecuadorean Government has several times begun negotiations for the sale of the islands, and as far back as 1851 the preliminaries of transfer were arranged with the United States, the sum offered being $3,000,000 for the right of collecting the guano that could be found on the islands. For various reasons the sale fell through, and while since that time tentative negotiations have been commenced during different administrations, no definite agreement has ever been reached. It is rumored that a prominent financier who is largely interested in Ecuadorean enterprises has more than a lien on these islands.

Summarized, the resources of the islands are as follows: The wild cattle found in large numbers on several of the islands, especially Albemarle, where it is estimated that the total number of cattle is about 40,000; the galapagos, or land turtle, whose commercial value has already been detailed, but which is unfortunately rapidly diminishing in numbers; the orchilla, no longer as valuable as in former years; donkeys, of which 20,000 fine specimens are roaming wild on James Island; seals, still found in great numbers on most of the islands; fisheries, already referred to; and the possibilities of the extensive cultivation of sugar cane and other agricultural and horticultural products. Citrus fruits thrive wonderfully in this climate and coffee has been cultivated with success. There are a number of sulphur deposits, as might be expected in volcanic formations. Some investigators see a considerable source of wealth in these.

In conclusion, it is only necessary to emphasize what has been said in the opening paragraphs of this article, that the situation of these islands on the crossroads of commerce will undoubtedly make them a considerable international factor of importance in the future. It might be found advisable for ships passing through the Panama Canal to coal at this point. The trade winds make it possible to lay down coal from Australia or Lota much more cheaply at Chatham Island than at Acapulco or Panama on the mainland. Because of their position within striking distance of this latter place their strategic value would be considerable under certain conditions.

It has been the purpose of this paper to set forth briefly the economic resources of the Galapagos Islands. Certain phases of their possible development have been only indicated, and it may be stated that the Archipelago de Colon, as the group is now called, will be undoubtedly one of the most important possessions of the Ecuadorean Government.

# TRADE AND DIPLOMACY BETWEEN LATIN AMERICA AND THE UNITED STATES[a]

THERE are as many nationalities in Latin America as there are in Europe, and a much wider range and variety of climatic and topographical conditions. Climate and topography are vital forces in the manufacture of mental conditions in the human being, and therefore it is almost axiomatic that the peoples of Latin America vary, one from another, quite as much as do the different nations of Europe. A discussion, therefore, in a single paper, of trade and diplomatic relations between Latin America and the United States must be as unsatisfactory as a similar discussion of the same question between the United States and Europe. If there be added to this the fact—which is sometimes forgotten—that the Latin-American Republics owe their origin to widely-varied causes and nationalities, it is clear that diplomacy and trade between ourselves and one or another of these republics must vary quite as much as our corresponding relations with Norway, or Italy, or Russia, or Germany, or England. The use of the general term "Latin America" has become common, because all the republics have a common root language and all have the republican form of government. And yet even the most cursory examination shows that the actual application of the republican form varies in each country, and the language is so different that books intended for Chile must be worded and spelled differently from those for Mexico or the Argentine. Furthermore, if the Uruguayan inhabitants to-day are the descendants of the hard-headed, clear-sighted, businesslike Galicians, they will necessarily have quite different ideas of trade and diplomacy from the Peruvians, who still have amongst them thousands of the descendants of the cultured Castilian viceroys and their followers. Any serious consideration therefore should cover diplomatic and trade relations between ourselves and a single Latin-American Republic, which would require a series of papers to cover the whole subject. Hence this paper can only give a series of impressions at best.

The commercial attitude of the people of the United States is not only humiliating, but sadly out of date. We are a most provincial and

[a] By Joseph Hamblen Sears. A paper read at the meeting of the American Historical Association in Indianapolis, December 29, 1910.

self-centered group of 90,000,000. The lack of knowledge of the geography of our southern neighbors is a small matter, but our ignorance of ordinary trade conditions is appalling! With the skillful insight of our legislators—which after all is only a reflection of the body politic—our laws do what they can to prevent any lines of transportation from bringing us into touch with anything south of Panama. But even to a casual traveler our trade knowledge of South America would be laughable, if it were not humiliating. We ship, for instance, to Lima, in Peru, cases of goods weighing four or five hundred pounds. This shipment must go completely around South America, through the Strait of Magellan in a foreign ship thousands of miles up the Pacific coast, and through the Tropics twice. It finally arrives at Callao, the port of Lima. This port is an open roadstead, exposed to the winds that come all the way from Japan. Ships must anchor off the surf and unload into barges. The latter are moored to the side of the steamer; and always, day and night, sometimes more, sometimes less, the great Pacific swell causes them to rise and fall from 5 to 15 feet, scraping alongside the larger craft. The 500-pound case must be lifted by derrick out of the steamer's hold, swung over the side, and lowered into the barge. It is no small matter to clear the hatch without bursting the case. It is still more difficult to lower the case into the barge without going through the bottom and sinking the whole affair. But when the case is once in the barge it must be stowed in place by men who have nothing, and never can have anything, but their hands to move it about. I have seen a shipment of weighing scales from the United States, each case almost as big as an upright piano, which these perspiring and cursing Peruvians tried to unload. Two cases cleared the ship and the barge altogether and found a quiet grave at the bottom of the sea.

Even this, however, is not absolutely impossible; but the next stage is pathetic at times. Let us say that these goods are bound for some interior city. Back of the city of Lima rise the great hills of the Andes, piled one upon another, forever covered with snow, in a latitude which corresponds with Havana. After leaving the railway up the mountains, there is only one way to reach the interior cities—by winding trails in some cases at a height of 15,000 or 16,000 feet. No wagons can go there—only the mule and the llama. These animals—indeed, nearly always the latter, because the mule has difficulty in breathing in these high altitudes—must carry everything. And they will go on for days with a 50-pound bundle on each side, 100 pounds altogether, in two packages. What are they to do with a case weighing 500 pounds and with the dimensions of an upright piano?

It seems amazing to an ordinary person that such ignorance should exist in this enlightened country, in this enlightened age.

But how much more amazing it becomes when one considers that these goods are shipped by commercial houses whose business it is to find out such conditions!

There are hundreds of such examples of goods shipped from the United States. There are almost no such examples of goods shipped from Germany, or Spain, or Great Britain.

And all these are small details, of which there are many more. For example, semiperishable goods, such as biscuits, films, hundreds of commodities affected by the heat or the cold, the wet or dry weather, are shipped just as they are shipped to United States ports; yet on their way to Colombia, Ecuador, Peru, Bolivia, and Chile they pass through the Tropics, through latitudes where it rains 10 times a day every day in the year, through latitudes where it has not rained a drop in a hundred years. One can imagine the kindly thought which a merchant in Cuzco has for the United States when he receives such goods packed in paper parcels or wooden boxes. There has been recently shipped to Cochabamba, in Bolivia, a consignment of 1,250 books. They were packed in 203 packages, incased in air-tight zinc boxes, which were inclosed in heavy wooden casings. And this is the journey ahead of them:

They must go around South America, be landed at Mollendo in Peru just outside the surf into an open barge, put ashore behind a breakwater and packed upon a narrow-gauge railroad car. They will then rise slowly and laboriously into the Andes to a height of 12,000 feet. There they are transferred to a steamer on Lake Titicaca, a lake 30 to 50 miles wide and 120 miles long. The steamer will go out of sight of land up there amongst the peaks of the Andes 12,000 feet above the sea; and finally next day the cases will be loaded upon a little train and run two hours into La Paz. Thence they must go on the backs of llamas up through the mountains to Cochabama. Yet the company which shipped these books once shipped the same quantity in two enormous cases and wondered that they never arrived at their destination! It would be laughable if it were not humiliating. And it should be borne in mind that these are not romances of the days of PIZARRO and the Incas, but practical commercial facts in the year 1910.

Furthermore, it is our custom in the United States, roughly speaking, to sell goods on what is called "30 days' time;" that is, unless other terms are agreed upon, the purchaser is supposed to pay 30 days after shipment of the order, or at most 30 days after the receipt of the goods. The corresponding period in most Latin-American countries is six months. A six-months' credit with us would be 12 months' credit in most Latin-American countries. Yet this appears to be so little known that when a South American stipulates

that his payment is to be made in six months, the North American merchant in most cases thinks that his customer must be "bad pay," and the sale is lost. As a matter of fact, the business intergity of the Spanish-American is so high that he very seldom fails to pay. This simple fact is not in itself particularly interesting in this connection. It is the universal ignorance of the fact on the part of merchants in the United States that is of moment, for this one small point alone causes unending friction, day by day, and the South American turns again, as he has many times before, to the Britisher, or the German, for something that perhaps is less satisfactory to him.

We will not learn that such customs, though different from our own, may be quite as good, if not better. The European has gone into South America and learned the facts for himself. He has taken the attitude that if he is to do business with Latin America he must learn Latin-American customs and adapt his business to them. Our merchant takes the attitude that the purchaser in Latin America must change his customs of trade and adopt those of the United States. And we wonder why we do not increase our trade with South America!

It would be interesting to take up the questions of drafts, of exchange, and of branch banking, but that is a subject for a series of papers in itself. Suffice it to note here that, so long as the banking laws of the United States forbid any form of surcursal, or branch, just so long will most of the banking business of Latin America be done through London. This one matter of exchange has a most vital influence on our trade with South America. Each Republic to-day has within its borders branch offices of European banks, and the lines of trade necessarily follow these. There is no question but that certain of our banks would open branches in many South American cities were it not that our laws, or at all events the present interpretations of our laws, forbid it.

In like manner the question of transportation is a block in the progress of closer relations through trade with our southern neighbors. In fact, the transportation situation is the most typical and most pathetic of all.

It is difficult to believe that the nation, which 50 years ago began the commerce of the world with South America, now has not one steamship line beyond the equator which regularly flies the American flag; that 91 per cent of the trade between the United States and the world is carried in foreign ships; that something over $300,000,000 a year is paid by the American people to foreign nations to carry that trade!

Senator ROOT[a] has gathered together some dramatic figures that are expressive of the present status. He says:

> In the year ending June 30, 1905, there entered the port of Rio de Janeiro steamers and sailing vessels, flying the flag of Austria-Hungary, 120; of Norway, 142; of Italy, 165; of Argentine, 264; of France, 349; of Germany, 657; of Great Britain, 1,785; of the United States, no steamers and 7 sailing vessels, 2 of which were in distress.

The high cost of living in our country, the high wages, the high prices of material make it cost us $4.37 per ton more than it costs a German steamship company to run a vessel. That is to say, it costs an American shipowner $43,700 a year more to run a 10,000-ton steamer than it costs a German shipowner to run the same vessel. In addition to this, the German Government subsidizes the lines running to South America. How can an American compete with this double handicap?

Yet when the subject of ship subsidy is brought forward, as it has been specifically in Congress for three or four years, there is distinct opposition. Up to the present time this has been strong enough to kill any and all measures, although the total expense necessary to subsidize lines running to all parts of South America from the United States and sufficient to put them on an equal footing with lines running from other countries would cost the American Government but one quarter of the profits which it makes out of its foreign mails alone!

Great merchants and traders as we pride ourselves upon being, we are day by day being quietly beaten at our own game by Europeans, and not because we are stupid, or behind the times, or poor business men, or without the desire for this enormous and growing market, but because we are so provincial, so set in our ways, so self-sufficient that we will not take the trouble to find out the customs of other nations, or if we do find them out will not believe that they can be good, because they differ from our own.

One of the most familiar explanations of this state of affairs is to the effect that the business men of the United States with their enormous country and untold resources have been too busy at home, have found too enticing returns near by to give them sufficient time to study the opportunities in Latin America, and that the Englishman was forced to seek outlets for his capital and opportunities for investment many years ago because there was so little left for him on his own islands. This is all true, but it makes no pretense to answer for the future, when, as is even now beginning to be the case, American capital will also have to look elsewhere over the new spaces of the earth for its best returns.

This must for the moment suffice for our North American side of the trade relations: That owing to the provincialism of our people

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[a] Speech of Mr. ELIHU ROOT on "Commercial Relations with South America," before the Trans-Mississippi Commercial Congress, Kansas City, Nov. 20, 1906.

we do not see the wisdom of applying such methods to South America as we have applied to Europe for a century past; that owing to our laws or lack of laws we are unable to compete in banking and shipping with European nations for this market.

Turn now for a moment to the Latin-American's attitude toward us in his trade relations. What is the attitude commercially of these great nations toward the United States? The answer is simple and direct—they do not know the United States as we wish them to know us.

With the few exceptions that do not change the importance of any statement, all the great enterprises, all the railroads, all the docks in the countries under discussion were conceived, financed, built, and are now run by Englishmen. Every railroad, with one exception, in the Argentine Republic was financed and built by Englishmen, and is now officered by them. The public waterworks of Buenos Aires, the tenth or eleventh city in the whole world, were built and are run by Englishmen. In the year 1909 Englishmen took $250,000,000 in dividends out of the Argentine alone. The railroad at Santos in Brazil, the docks of Rio de Janeiro, the wonderful trans-Andine railroad which runs across the continent from Buenos Aires to Valparaiso more than 800 miles and over and through the Andes were all financed in England. One famous and perhaps the most remarkable enterprise of all—the Oroya Railroad, from Lima to Cerro de Pasco, which climbs nearly 16,000 feet above the sea and crawls about among the cliffs and crags of the Andes—was conceived and built by an extraordinary American named Meigs. But he could not raise the money to finance it in the United States, so that now it is practically owned and is actually run by Englishmen.

The natural result is that when the Governments of Latin America or some group of business men conceive a large commercial enterprise they never think of turning to anyone but the English for the money, the engineers, and the operators.

Through the energy and patriotism of our distinguished minister to the Argentine, Mr. Charles H. Sherrill, the Argentine Government has recently awarded to a company in the United States a contract for the building of two warships, and the amazement of the Argentine business men was almost comical when the announcement was made. They hardly believed that we could build ships. They talked about it on street corners. And the English colony became highly indignant. English shipbuilders had interviews in the Buenos Aires newspapers, stating as a well-known fact that shipbuilding companies in the United States could not possibly build such craft, that no one could equal the Scotch and English shipyards, that therefore this strange award must have been brought about by bribery and

corruption; whereas it was simply one isolated case of an American company studying the problem and putting in a bid that secured the contract from 35 other competitors. There are something over 40,000 English residents in the Argentine. There are 400 Americans. What should or could induce the Argentine people to turn to the United States and ask for terms and bids on any such enterprises?

Suppose, however, that they should, as they occasionally do? They are met with ignorance on our part; with lack of knowledge of packing and shipping necessities; with only four or five steamship lines sailing from the United States and not flying the American flag either; with demands for payment which are totally unknown, unexpected, and insulting to any Argentine house of standing; and finally with no facilities for financial relations except through England.

Why, in the name of good common sense, should the harassed Buenos Aires merchant buy goods on hard terms from the United States that may be shipped first to England and then to Buenos Aires, paid for sooner than he ever has to pay anyone else, and paid for at that through England! The South American simply does not, as a rule, consider the United States as a commercial possibility.

Nevertheless, the Latin-American does know the United States of North America; though one distinguished and cultivated professor in a South American university put his finger on Puget Sound when asked to place New York City on the map. Yet he might well have asked in return any cultivated North American *confrère* to place Corrientes, or Rosario, or Iquique, or Cuzco—all important places in South America—and have had a better chance to laugh. In my national egotism I once asked a man on the street to direct me to the United States consulate. He lifted his hat, smiled, said "Certainly," and turned to walk with me to the corner, where he pointed out the consulate's sign a few hundred feet away. I thanked him and proceeded alone to the house. It was the consulate of the United States of Mexico.

Yet they do in a way know our country, principally, however, as a great agricultural nation which has in some unexplained way assumed a protectorate over their continent. And that approaches the second portion of the subject.

All questions of diplomacy are to-day allied to commerce, and the union of the two seems to be becoming ever closer. As the diplomat who once was the person of the sovereign sinks or rises into the diplomatic agent of a Government, he finds more and more that commercial relations are the vital forces in maintaining peace and friendship between nations. This is as true of the diplomatic relations between the United States and Latin America as elsewhere. We have comparatively slight trade relations with our southern neighbors, and therefore our diplomatic relations with them are not as important

and extensive as these relations in other parts of the world. Nevertheless the active work of the Pan American Union and the promotion of Pan American congresses is doing a great deal to bring us closer together and, what is far more important, is beginning to force upon the citizens of the United States the necessity of learning something of the practical conditions existing in more than half of our Western Hemisphere. Yet there is an enormous amount of education still needed and the Union has good work ahead of it for years to come, unless our countrymen wake up to their ignorance faster than they have in the past.

It is not so much that we do not understand Latin America; it is that we do not attempt to understand.

These Republics have developed enormously in the last two or three decades. It should be kept in mind, for example, that the city of Buenos Aires has increased its population in the last 11 years 100 per cent while New York—the great grower—has in 10 years only increased 48 per cent. That is to say, Buenos Aires has grown twice as fast as New York in the same period. It is now a city larger than any other in the United States with the sole exceptions of New York, Chicago, and Philadelphia. It is three times the size of Rome. Its traffic problems are far greater than those of London or New York. It has grown so fast that improvements can not possibly keep up with it. Children are without schools each year, though Doctor Naon, until recently Minister of Education, has spent the best years of his life in finding housing for them and raising money for maintenance. The treatment of immigrants is more systematic and complete than anywhere else in the world. The hotels equal those of New York, London, and Paris. It is a cosmopolitan city—not a huge border town—where all languages are spoken and all nationalities gather. The country of which it is the capital, and most other South American Republics, are changing in the same way—moving forward each year with astonishing speed. Meantime, as the Governments strengthen, revolutions are becoming a thing of the past.

When an American citizen goes to England and reads the English papers to see what is taking place in his own land he is amused to see only accounts of floods, railway accidents, and lynchings. When a South American comes to the United States he feels the same amusement at reading of nothing but revolutions from his native land. I have heard citizens in different cities of South America on days before election crying "Revolution!" as they marched through the streets, and felt that at last I might see one. It was nothing more than a New Yorker's cry of "Vote for Taft!"—or women. In fact, the suffragette demonstrations in London are much more serious than the average South American revolution to-day—not of

10 or 15 years ago, but of to-day. In other words, they are seldom more than riots. The Mexican troubles we have read so much of recently are partly riots and partly the press agency work of the opponents of President Diaz, who reside for special reasons in the United States.

The real causes for differences between the Republics are the final settlements of boundary questions between the eastern borders of the Pacific States and the western borders of the Atlantic States. These may in the future be settled amicably by The Hague Tribunal, or by arbitration—far more peaceably than similar questions were settled in our own country.

Furthermore, the Latin when he gets into a discussion has for hundreds of years been accustomed to make a final settlement with knife or gun, as the Anglo-Saxon would go to court, or the Frenchman to a duel. Consequently, in riots in Latin America there is still likely to be a tragedy at the end, just as there used to be in our cowboy days in the West, is to-day in our southern color-line disagreements, and will be for a long time to come in our labor strikes and riots.

It is trite to recall that for 300 years all Latin America was ground beneath the worst government human beings can live under; that then suddenly groups of men who had for generations been serfs were told to come to the polls and vote. They did not know how. They are beginning to learn now. That the Chileno, the Mexican Indian, the Araucanian, the inhabitants of the montaña, may not always be able to cast an intelligent vote, because the Anglo-Saxon can do so after fighting for 200 years to get it, is just as trite a remark. Hence the adaptation of the Anglo-Saxon's constitution to suit other peoples has made each Republic in its governmental workings different from all others and all different from our own. Even ours has not that smooth, peaceful, untroubled progress which would admit of our throwing stones at our neighbors. But the growth to the south of us in the last 10 or 20 years has been marvelous. Each nation now in Latin America, with the evident exception of two or three, is a nation.

These people are not nations of shopkeepers. They are emotional and sensitive always, and when educated they are cultivated and refined to a degree seldom found in our own land. Every boy and girl of a well-to-do family in Peru, Chile, and the East Coast Republics, looks forward to finishing his or her education in France. Even from Peru, 44 days from Europe, all women look to Paris for their fashions just as our own sisters and wives and daughters do. All scientific books are in French; none in Spanish. A professional man must and does read French, though many do not know English at all. In other words, their center of cultivation is France. They know of no

particular forms of culture that lead them to turn to the United States. Occasionally one finds a man who has been to Cornell, or one of our larger colleges, where engineering and agriculture may be made a specialty, but this is very rare.

These refined, cultivated, sensitive people are influenced by their nature toward evident tendencies. When Chile and the Argentine at last settled their boundary disputes along the peaks of the Andes, they melted up the bronze of the cannon they had turned against one another and cast an impressive statue of CHRIST, THE PACIFICATOR, 40 feet in height, and set it on a pedestal at the top of the Pass between the two countries 13,000 feet above the sea. There it stands alone and solitary on the boundary line, amidst the snows and glaciers, far above the spot where the railroad at its highest point tunnels through the final range.

Like our Statue of Liberty in New York Harbor, the impetus which suggested it came from the warm-hearted, poetic Latin nature.

Upon this foundation is superimposed the Monroe Doctrine. When Mr. MONROE issued his message he undoubtedly, with this country behind him, made for the peace and independence of Latin America, whether he intended it or not. Many students have spent years in interpreting the Doctrine, its importance to us, its wide influence over the history of the Western Hemisphere, and it would be folly to attempt any discussion of it here. For the present purpose it is sufficient to accept the hypothesis that the Doctrine was a perfectly proper and highly necessary attitude taken by this country to protect itself from dangerous invasion by foreign powers upon this Hemisphere. But years have passed since then, more especially the last two decades; and that Doctrine has developed a different significance in the mind of the South American.

Here are really great and growing nations who from time to time hear a little-known country farther away from them in miles and associations than Europe, issuing what they consider its ukases that it will look with disfavor upon any interference with their progress. They know France well. They have thousands of Germans amongst them who carry on trade in their midst. The English they have with them always. And some one whom they do not know presumes to assume what to their minds is nothing less than a protectorate over them against these very peoples. This is not a situation in the days of President MONROE; it is a situation in the Twentieth Century, and the Twentieth Century is a very different one in South America from the Nineteenth.

This attitude toward the Monroe Doctrine confronts one in most serious conversations with thoughtful, patriotic citizens from Ecuador southward and around the Horn to Brazil. How much farther it goes, I can not say; but I have myself found it in almost every office—

certainly in every drawing room visited. Sometimes it seems to carry an idea that we are seeking eventually to absorb the Southern Continent. Sometimes it is simply offended national pride. But the sentiment is there, and if we in this country do not know of it, it is time that some one told us. The Monroe Doctrine to-day, if it is not to be an underlying cause for diplomatic friction in a sufficiently clouded situation, should be made to typify to the Latin-American mind a mutually beneficial alliance, not a protectorate assumed by the United States. That there is no intention of absorption or protectorate on our part, that there never was any such intention, that we were only thinking of ourselves and protecting ourselves from European invasions on these two continents, carries no particular meaning to Latin-Americans to-day, because they do not have any vital interest in our views. And they have no vital interest in our views because they do not know us. What the real nations to the south need from us is our acquaintance and cooperation; and we certainly need theirs. For acquaintance and friendship and cooperation the world over spell commerce; and with close commercial relations war is held closer in check as the years progress.

Diplomatic relations end when amicable relations cease. There is nothing that makes for amity so strongly in these modern days as close commercial relations, which are mutually advantageous. Year by year commerce, which has been called war, tends more and more to preserve the peace, and one method toward intimate diplomatic relations with South America is to cement closer and closer the present very slight commercial relations between them and ourselves. It should be emphasized that our consular and diplomatic representatives in the Republics under discussion are working to extraordinarily good purpose in this direction, and the State Department, by the actual results that are being produced, as well as by the statements of its representatives, is insisting on every endeavor being made to push forward all legitimate commercial enterprises of Americans in these countries.

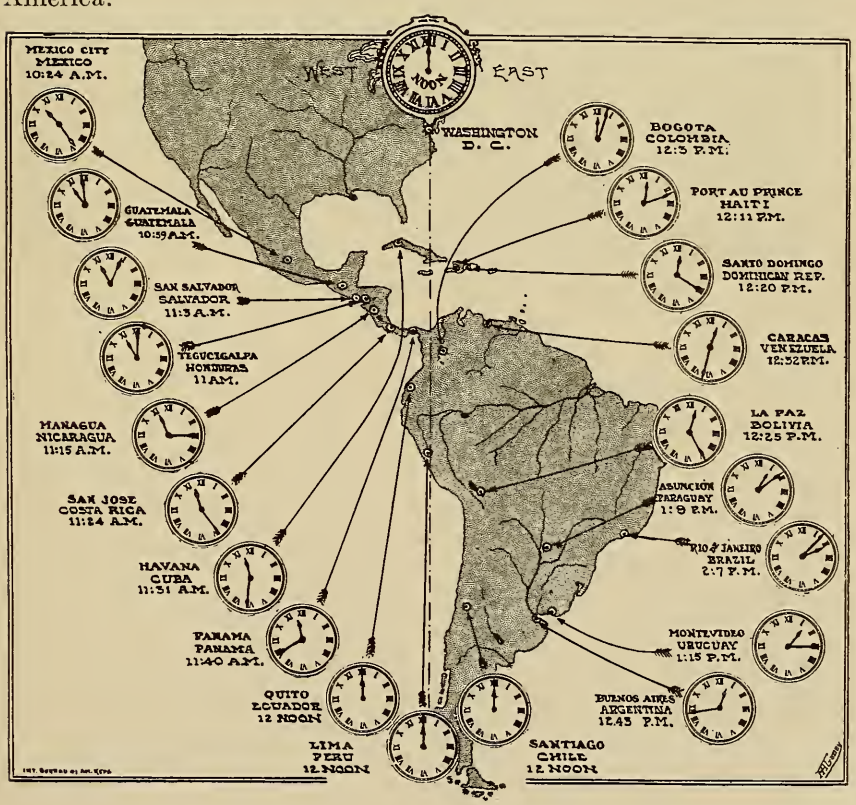
The work of our Government in its field, the work of the Pan American Union and the different congresses in their fields, is all good and to the point. But nothing will be accomplished to promote closer relations in trade and diplomacy until large numbers of individuals in this country become interested themselves. And to provoke this individual interest should be the purpose of those who know the facts.

To summarize this slight presentation, it is made clear to any observer of Latin America that the opportunities for trade relations are legion; that we do not as a nation yet recognize this except in a few isolated cases of smaller articles; that the question of large enterprises such as coal, partly manufactured steel—all such branches

of trade—are not yet considered here, but are sure of a good market there; that transportation is pathetic; that our lack of knowledge of conditions is ludicrous; that direct banking facilities do not exist; that as time goes on and these do not improve the impression created by the United States is increasingly unfortunate and, of course, unnecessary.

Likewise in diplomacy the impression is gathered that a different attitude is to-day necessary on our part from the attitude which was correct in 1823; that evermore care should be taken by our diplomatic and consular representatives to assist American merchants with information and advice both here and in the different Republics; that patriotic, clear-headed, practical men like Mr. SHERRILL, in Argentina, and Mr. GODING, the consul general in Uruguay, should be selected and urged to accept diplomatic and consular positions; that the State Department should listen carefully to the advice of such men before taking definite positions.

Finally, it is clear that diplomatic relations will always follow where the ingenuity of the individual pushes trade, and therefore our trade and diplomatic relations with Latin America, to use the simile of the game of chess, might be said to be in the following position at the moment: It is the move of the United States—not that of Latin America.



# TRAVEL NOTES IN CENTRAL AMERICA

New Orleans, *December 1, 1910.*

*To the Editor.*

Dear Sir: I fancy that my traveling friend will say, when he reads my last letter describing the conditions under which he must go to Tegucigalpa, "Thank goodness, that's over." But I must not allow him to congratulate himself too soon. I can only reply, "Cheer up, the worst is yet to come!" Which is the simple truth, because the trip from Tegucigalpa to Cortes on the north coast of Honduras is the roughest route of routine travel in Central America. Anything more primitive becomes, practically pe akisng, breaking one's way into the wilderness.



A BRIDLE PATH ACROSS HONDURAS.

The greater part of the way from Tegucigalpa, Honduras, to the north coast is over the mountains, which do not attain to a remarkable height, but are nevertheless at an elevation of from 2,000 to to 6,000 feet. The trails skirt the slopes, keeping usually within the *pine* region, and pass below that belt into a more tropical area only on rare occasions. For the pack and saddle animal these paths are open enough, but a cart could not possibly negotiate them.

But what is he going to do about it? To be thorough, he should not omit the capital of the Republic, and once in Tegucigalpa, it would be foolish to go back to Amapala over the same road. I have known people to do this, however, and then to take steamer to San Jose de Guatemala, cross that Republic to Barrios, and catch a steamer from there to Cortes, a trip of at least 14 days' hard traveling, two of which must be in the saddle. Compared to the straight north road of six days in the saddle, it is a waste of time. Overland is no trip for a woman; although, on the other hand, I have known them to make it in 14 days or even less. But perhaps I can make the journey clearer when I come to it. Let me get back to where the start is made.

Tegucigalpa is a city of about 40,000 inhabitants, counting the adjoining neighborhood, which includes several mining camps and a few suburban settlements. It is the center of Honduras social and political life, and in reality exercises considerable influence over business and commercial activity in all the country. The best store

are here, and almost all retail supplies for interior towns are purchased in them, although they are closely connected with the importing houses at Amapala. It is a great mistake nevertheless to assume that on that account nothing is to be gained by visiting Tegucigalpa. The stores and merchants in that city set or follow the fashions, and often buy for their trade articles not furnished by the importing agents, because these agents handle staples chiefly and do not always know what is wanted according to the styles or seasons, while the retailers most certainly do know. That's their business.

My advice is, therefore, that Tegucigalpa ought to be visited by the salesman. Germans go there regularly, but Americans are rarely seen, more's the pity. There is a small American colony in the city and many American employees in the near-by mining camp. If they had the opportunity to purchase home-made goods, instead of foreign stuff, they would do so. As it is now, about the only choice offered in the entire region is between English, German, or French articles, which are in themselves worth the price, but do not meet the demand which the United States can so easily supply.



THE "CABILDO ' IN COMAYAGUA, HONDURAS.

The *Cabildo* in many Latin-American towns is what would be called in English the town hall. Comayagua was the original capital of the Republic, but is now only the capital of a department, although commercially it is one of the most important centers in the country. Some of the old architecture is fine, and of the newer structures the Cabildo is the best.

It is another matter, however, to decide whether to try for such isolated towns as Danli to the southeast, Jutigalpa to the northeast, Yoro to the north, or a few smaller places to the west. I should say "No." For the present these side trips would be too costly, and in all probability the large dealers in the capital, some of whom I know have branches in the interior, would satisfactorily extend the market in that direction. The principal point gained is to establish a center of influence in the Republic, and this is best accomplished right in Tegucigalpa.

So, therefore, let's be on the move toward Cortes. If the alert traveling man studies the country in this way, he will discover many things needed by the natives, no matter how poor and meager their lives appear. There is really no manufacturing activity in all the Republic. The people produce nothing beyond what they can piece together in their homes, yet they can buy and pay for imported supplies, as is proved by the sight and sound of sewing machines in hamlets of the most lowly kind. I haven't found that trade knocks at a man's door very hard; it can always be developed, but some one must hustle for it.

After all, the best argument for the trip to the north coast instead of the return southward through Amapala is that between Tegucigalpa and Cortes the richest portion of the Republic is crossed, and in this section whatever railroad is built in the future is bound to be located. In addition to which, the trip brings one out past the town of San Pedro Sula, the interesting American settlement not far from Cortes, and offers a chance to see what has been accomplished here.

I have made the journey from Tegucigalpa to Pimienta in six days. It can be made, by a little extra effort, in five days. Good travelers frequently make it in four days, and I heard of one instance, which I thoroughly believe, when a native boy, urged by the offer of a fat reward, reached the capital on the evening of the second day, having left Pimienta about sunrise. This was on foot, however, for the *mozos* in Honduras, as I said before, run along the mountain trails and make better time this way than if they went on horse or mule back. But six days is the saner reckoning, omitting, of course, any serious attempt to do business along the way. If sales are to be discussed, it will take two or more days and probably a week longer.

It is about 180 miles (290 kilometers) or as they reckon in Central America, calling 2½ miles a league, about 72 leagues from Tegucigalpa to Pimienta. Please don't laugh at the repetition of the word "about." The traveler in Central America, and for all I can hear in all Latin America, learns to take philosophically the native statement of *poco mas ó menos* (a little more or less), or to smile when, after having been jogging along for an hour to a place said to be 4 leagues away, to hear from the chance passenger on the road that that very place is now 5 leagues farther on. Anyhow, I base my estimation on personal experience, on careful computation by other Yankees who have made the trip, and on the assertion of the *mozos* who have an acute feeling of distance. I am perfectly satisfied to stick to this distance until a surveyor measures it by scientific instruments.

The traveler, besides the outfit I mentioned in my first letter, must provide himself with his own hammock, a blanket, and a revolver. The saddle and pack mules he can hire from a responsible stable keeper in Tegucigalpa, who will necessarily furnish the *mozos* to accompany the animals. A man traveling light may buy his horse or mule, but that would be foolishness, and he would lose time and money in the long run. I'll explain the reason for all three of these pioneer articles.

The hammock is essential for the comfort and decency demanded by the respectable traveler. There are five nights on the road. In only two of the stopping places are beds obtainable, and even then this is not always the case. Other travelers may arrive before you do, and they may be quartered in these beds, or you may not like the beds. One's own hammock, on the contrary, is always one's own, and relatively clean. The native cottages are simple affairs, and the inhabitants probably possess one or more beds, but it is a great deal to ask that he or she vacate the bed, for it must be remembered that there are no hotels on the way and that every night's lodging is a matter of courtesy and not a commercial transaction, although of course it is paid for.

The same rule applies to the blanket. Every night of the five is cold. In Proteccion, very cold, for the altitude is way above 4,000 feet, and to wrap one's self in a warm blanket is necessary for comfort. This is the only safe rule.

As to a revolver, there may be some argument. I have traveled in most parts of Central America and Mexico with no weapon whatever, and yet, in some of the wilder sections, like this in Honduras, brigands are occasionally met, or rather are certainly prowling around. They rarely molest a foreigner. Nevertheless, it is the custom of the country, and the natives undoubtedly have more respect for the traveler who is armed. It always seems ridiculous, but I yield to custom and carry a revolver. The next fellow may do as he pleases.

Now a word as to the money of Honduras. From Amapala to Tegucigalpa almost any money will pass, as Central American paper or especially United States gold, can be exchanged at the port for native currency. From Tegucigalpa to Cortes the

natives understand only local money. A *peso* silver, in Honduras, is nominally worth $0.382 gold. Actually it fluctuates at 280 or above; that is to say, $1 United States gold will buy 2 *pesos* and 80 *centavos* paper, more or less, according to exchange. On the way north, as far at least as Comayagua, paper *pesos* with silver fractions are preferred and must be used, but it is wise to have the bank notes stamped as available in San Pedro Sula and Cortes. Any business house will explain this detail. The closer one comes to Cortes the more currency in Guatemala silver is used. This is a funny state of affairs, because this same silver, although preferred in Honduras, has practically no value whatever in Guatemala, and once across the border is worth only what the traveler can sell it for, which is precious little. It is best, therefore, to get rid of it while in Honduras, and to trust to United States gold until reaching Guatemala City.

But to begin the journey. I give my itinerary day by day, and shall go into detail only where necessary.




A RESTING PLACE FOR THE NIGHT.

There is really no licensed inn along the entire north road in Honduras. Every village has, however, some kindly person, a widow, perhaps, who is willing to entertain the wayfarer with food and a night's lodging, although no one feels obligated to do so. The traveler must therefore supply his own hammock and blankets, which the *mozos* arrange, while looking after his comfort in other ways.

First day: Tegucigalpa to Proteccion, 36 miles, leaving at 6 a. m., over a winding mule trail toward the north; elevation 8.30 a. m. 4,500 feet, descending gradually to Tamara, a hamlet where luncheon is taken. Now the road crosses and recrosses the Rio Hambre, up the valley to 4,500 feet again at 4.30 p. m., and again up and down till 5.30 p. m. at Proteccion at the same elevation; a village where a hospitable old woman grants food and lodging, i. e., permission to sling a hammock and to crawl under one's blanket at 8.30 p. m., tired out.

Second day: Proteccion to Comayagua, 36 miles, starting at 6 a. m. just at sunrise. The day before, traveling was rough, in valleys and with little signs of habitation after the outskirts of the capital had been left behind. To-day it seemed at first worse than yesterday. Rocks are everywhere, the path only between the stones for an hour, and then begins a steep descent of 1,000 feet, better undertaken on foot for comfort and to relieve the mules, into the valley of Comayagua, a wonderful expression of nature, 40 miles long I should reckon, and 25 miles broad. It is fertile at all periods, but dry in the dry season, yet irrigation, which should be easy enough, would work wonders for corn, cattle, sugar and similar crops. Flores is a desolate hamlet at the edge of the

valley, away from the rocks that form the cliff-like sides down which we came. Flores is half way, the remainder of the journey being on level ground, hot and lonely till the ruins of the original Comayagua are in sight, once the capital of Honduras. Comayagua we reached at 4.30 p. m. It is a pretty place, abundant water, several good sized shops, and the center of all the business in the neighborhood. It might be a city of 100,000 inhabitants instead of the meager 7,000 or 8,000 claimed, and will some day be worthy of its ancient glory. Elevation 2,500 feet.

Third day: Comayagua to Cuevas, 30 miles, leaving at 6.30 a. m. to arrive at 5.15 p. m. You must take my word for it that the north half of the Republic is a thousand times more fertile than the south half, and immeasurably better watered. The *mozos* (servant boys) assert that the running water is all pure and sweet, and I have drunk from many of the springs and rivers without bad results. On this day's journey every variety of scenery, from Tropic banana groves with palms and ferns, to heavy pine forests at an elevation of 3,000 feet, is passed. One drop I have measured is 1,200 feet,



THROUGH THE JUNGLE, IN HONDURAS.

As the path approaches the north coast, it falls from the interior plateau to a much lower level, and for many miles passes through a truly tropical jungle. No thoroughfare is possible a few feet beyond the cleared road. In the dry season pack and saddle animals negotiate it easily enough, but during heavy rains it is nearly impassable. For the commercial traveler this portion of the journey is a hardship, but for the student and tourist, interested in novel scenes and experience, the day is one long to be remembered.

where the river Umuya is crossed, but Cuevas is 2,100 feet up on the top of a hill, like a fortress commanding the valley below.

Fourth day: Cuevas to Miambar, only 18 miles, but called by the boys the worst day of all, because of the steep hill climbing. We left at 7.40 a. m. and arrived at Miambar 2 p. m., elevation 1,600 feet. Pine on the mountain side, Tropics in the valley, up hill or down dale all the way, a few more villages in sight and more signs of farming, but no real industry, only corn fields, cattle, and pigs.

Fifth day: Miambar to Santa Cruz de Yojoa, 30 miles. Left at 4 a. m. to arrive at 4.30 p. m. The most beautiful day of all. Tropics, pine, rocks, and meadows, at elevations from 1,500 feet to 2,500 feet, but Santa Cruz is 1,800 feet in a fine valley, perfectly suited for breeding and rearing fat cattle. There is another road toward the west, preferred by some, but so far as I can see there is no choice, one being no better or worse than the other, although the Santa Cruz road is the more popular. For the last two hours of the journey, at an elevation of about 2,000 feet, there are vistas like the rich fields of Arkansas, red soil and deep grass, and at times I have been reminded

unmistakably of the meadows of Kent, in England, except for lack of villages and of the peaceful signs of country habitation. One of the natives told me that years ago the whole neighborhood was much better cultivated, but that nowadays many ranches have been abandoned, the only hope of renewed activity being in the long deferred but ever expected railway extension from Pimienta to the interior.

Sixth day: Santa Cruz to Pimienta, 30 miles. Left at 6 a. m. and crossed to Pimienta on the Ulua River, the biggest in Honduras, at a few minutes after 4 p. m. The road, after staying on the plateau for over an hour, drops steeply to 800 feet into the really truly Tropics. Sugar, a few bananas, and cattle; plenty of water, and the rest of it jungle, so thick that a *machete* is needed 5 feet off the road. This is newly built, and shows it, but Pimienta is so near that the last few miles of hardship pass quickly enough. We are close to American civilization now, and begin to dream of beds, shops, and business, since nothing for the four days after leaving Comayagua can remind me of whatever brought me here.



THE MAIN STREET IN SAN PEDRO SULA, HONDURAS.

San Pedro Sula is the most modern town in the Republic. Distant only a few hours by rail from Puerto Cortes, it lies in the heart of a rich banana and tropical agricultural region, yet close enough to the mountains to possess a fine climate. Many Americans live here, and they have introduced their energy in social and industrial matters.

The cost for each mule and boy has been about 50 *pesos* ($18 gold), and say $2 gold a day for all extras.

Pimienta is the present terminus of the Honduras Railway (National), 57 miles (90 kilometers) from Cortes. Steamers can ply on the Ulua River as far as this point, and when the spring freshets are not tearing things to pieces, they keep active in carrying fruit or hardwoods from here to the coast. I have crossed the river in a dugout, but those who live on its banks say that in the rainy season it is all one's life is worth trying to do so until the water goes down. No business here, either, so it is best to hurry on to San Pedro Sula, 19 miles (30 kilometers) toward the north, and 37 miles (60 kilometers) from the terminus, Puerto Cortes, on the Gulf of Mexico.

San Pedro Sula is worth while, and the many good American residents living in the place welcome the traveler. Their panic of 1906 is a thing of the past, and, although the boom of earlier days has quieted, the town and its surroundings are yet sure of normal and healthy progress.

Cortes is a vantage ground for this part of the Caribbean coast. Eastward are the ports of Tela, Ceiba, Iriona, and Trujillo, which can be visited by means of local

schooners or launches, while toward the west are the two ports of Guatemala—Livingston and Barrios—only a few hours away by frequent steamers from New Orleans to or from Cortes.

I shall not take up much of your time in discussing the Republic of Guatemala. It is getting to be well known, appreciated, and traveled. Almost all available territory is approachable by the railways, and the interior towns are quite easy of access by stage, wagon, or the faithful mule.

From Livingston, for example, which is now regularly scheduled by steamers from New York and New Orleans, traffic is carried on by lighter steamers passing up Lake Isabal and by a short railway extending toward the northwest. This is the nearest way to reach Coban, one of the largest and most prosperous cities in central Guatemala. The ordinary traveler seldom goes there, however. To the south a railway connecting with steamers at Barrios and offering a daily service—again sunrise trains—takes you to the capital, Guatemala City, in about 10 hours, from



THE PIER AT PUERTO CORTES, HONDURAS.

This is one of the finest harbors on the Caribbean Sea. Protected from most storms, it has the advantage of deep water close to the pier, so that steamers of good draft can lie alongside. The town itself is doing considerable improving, by filling swamps and draining stagnant places.

which another line goes to the port of San Jose de Guatemala, or westward at the base of the mountains, almost to the Mexican frontier.

To Guatemala City must be given at least one week, but two weeks are none too much. Then there are Antigua, 5 hours away by stage coach; Mazaltenango to the west, Retalhuleu and Caballo Blanco toward Champerico on the coast, both towns becoming important on account of the approach of the Pan American Railway over the Suchiate River between Mexico and Guatemala; they will be busy places and worth careful attention when travel from one capital—Mexico and Guatemala—to the other is made possible by rail connection. Quezaltenango, up in the mountains above these places, will take three or four days more. I can put a conservative limit, therefore, on all of Guatemala of three weeks, but even then the field is by no means covered.

Of the money of Guatemala I am rather afraid to speak, because it is so apt to be changed before this is read. When I last was there only paper *pesos* were in circulation, silver money of the country's coinage being, as I said in Honduras, unrecognized by the people, although used in that next-door neighbor. The paper *peso* should be equal to a silver *peso* of the four other silver Republics—38 cents and a

fraction gold—but it isn't. Its depreciation was such that it was worth about 6 cents gold, all payments being made on that basis. Local prices are in this paper currency, so that living is cheap, but importations are priced in gold values, so that such values appear excessive. The merchant must judge accordingly. This awkward condition is bound to be remedied within a short time, however, just as sure as the sun shines, and then I warn the American manufacturer that if he hasn't kept his eyes on Guatemala, he will have overlooked a splendid market for his future trade.

Now let me sum up, Mr. Editor, because I feel that I am stretching these letters to an unwieldy length, and I do not wish to spoil the pages of your splendid BULLETIN by unreadable matter.

Guatemala can of course be visited by itself, and I advise the novice, who knows nothing of Latin America, to try first either this country or Costa Rica alone. The time allowance should be six weeks from New York or New Orleans and return, for either country, or say, 10 weeks for both of them together, as it is not hard to cover



ONE OF THE MODERN BUILDINGS OF THE COTTON FACTORY AT CANTEL, GUATEMALA.

Not far from the city of Quezaltenango is a well-developed and splendidly equipped cotton factory, using as much native cotton as may be grown, but importing chiefly the raw material from the United States and elsewhere. Only simple cloth is as yet manufactured, but the supply seldom is great enough to meet the demand within the Republic.

both of them in one trip, taking steamer along the Pacific side or recrossing one Republic to find a steamer on the Atlantic side plying between Limon and Barrios.

But I started out to break the illusion of my friend who was going to "do Central America in three months." It simply can not be done decently. In my last itinerary I had used up 14 weeks in reaching Tegucigalpa. Two weeks is a modest limit between the capital of Honduras and Guatemala City, if any effort is made to sell goods, and that's what he would be there for, I fancy. Three weeks more for Guatemala, and one week on the home trip. Six and 14 make 20, which is nearer 5 months than 3, and close reckoning at that. Even such traveling does not cover all of Central America, for the east coast of Nicaragua—Bluefields—and Belize in British Honduras, are active buying towns, if worked right; but these places can not well be included in such a Central American schedule as this, so I omit them from consideration.

Twenty weeks takes in all of Central America in one trip. Nothing less will reach the territory satisfactorily. Salvador can be visited alone, if desired, by the newly organized service through the City of Mexico (or Veracruz), 8 days from New York,

but even that means 6 weeks to one Republic alone, while I have covered them all in my scheme of 20.

I have said little about the cost, because that differs according to the individual, the goods he carries, and the character of merchants with whom he expects to deal. Twenty weeks contain 140 days; estimate $10 gold a day, or $1,500 in all, and I am sure that a hugely generous allowance is made, which should embrace everything and leave the traveler free from worry about emergencies that might arise. I speak only of travel in the dry season—December to April—for in other months the expense of time and money will surely exceed this limit.

Will it pay? This is of course the first question to be asked in considering any such venture. From my own experience I shall answer, yes. Perhaps not the first time, however. Yet I think the right man, making friends and demonstrating the excellent quality of his wares, can meet these expenses. But the great gain will be to establish a market, which is decidedly more easily developed on the second trip, and subsequently. Keep at it—just as a man would in the States. This is the best and in fact the only rule. The man who hopes to sell just once, with only a slight prospect of tempting the market another time, should leave it alone.

Now, what to sell? Almost anything. I am not sure but that even pianos might turn out profitable, but I wouldn't advise a person to try that line only. The people in Central America are musical and would surely take to phonographs. But the simpler necessities and articles approaching to luxuries are most in demand. I will not presume to specify what particular goods to offer. Machinery, house fittings, clothing, tools, canned goods—in a word, *staples*, which implies the immense mass of articles wanted by Central Americans, and at present supplied to a liberal extent by European exporters. But caution must be observed that good goods are shown and delivered. Even a native can be fooled only once. I know of an instance in Central America where barbed wire was furnished on a close contract, and the money paid in due time, but the wire lasted scarcely two years, and is to-day a standing advertisement in favor of German wire, which ten years after it was put up as a fence is serving its purpose.

But, Mr. Editor, I must close. I had not intended to go into the question of markets and methods. I see you have headed my letters "Traveling notes," and it is best to limit them to that subject. I surely am grateful to you for the space you have given me, and I sincerely hope that some reader may take me seriously and be encouraged to trust the highways and byways of Central America in his ambition to expand our American trade as well as our American ideals. The people there like Yankee goods. They will buy them, but as a rule only when they are shown at first hand by a man who knows his business.

Thank you again for your patience. I want to see these countries better known and understood. I think American manufacturers ought to make earnest efforts to meet their wants. It can't be done, however, by catalogues and quotations. If the money spent in postage and for translations were put into a personal venture of the kind I have tried to analyze, I know that the era of peace and prosperity in Central America would be hastened to the benefit of all concerned.

VIAJERO.

# SOUTH AMERICAN TRADE HINTS[a]

THE North American manufacturer has been so busy developing and extending the home market and taking care of the wants of more immediate neighbors that the opportunities of trade in the South American field have been in a measure neglected. Conditions are changing, however, and the merchants of the United States are at last awakening to the possibilities of exchange of commodities to mutual advantage with the Republics to the south of us.

It is idle to speculate as to what will be the ultimate economic effect of the construction of the Panama Canal, but the many columns of copy already inspired by the inauguration of this great work have made for a keener interest in all things South American, and this general interest is gradually resolving into special investigations that have in view the acquirement of information of a practical value.

The Pan American Union because of its international character encourages all nations to enter the commercial arena of Latin America, and to this end puts the vast amount of data available in its files at the disposition of the merchants of the world, believing that healthy commercial competition will react greatly to the advantage of the member nations of the Union. The merchants of the United States are, however, more backward than their colleagues of England and Germany in Latin American fields, and so it becomes necessary from time to time to urge them to special effort.

It is the purpose of this article to indicate in a general manner the ways and means of extending American trade in Latin American countries. The information contained herein is the result of 10 years' intimate personal acquaintance with Latin peoples incident to voyages undertaken through the West Indies, Mexico, Panama, and parts of South America, and the careful perusal of recent trade reports.

No claim for startling originality is made, as the facts stated have been common knowledge to English and German firms, and some American houses that have been engaged in South American trade.

To the manufacturer conversant with commercial conditions in the Republics south of the United States much that is contained herein may seem elementary, but the almost disheartening ignorance

[a] By Granville Fortescue.

of the majority in regard to the resources and progress of the Latin-American countries makes it necessary to treat the subject in A B C fashion. We will arbitrarily divide the merchants who are looking Latin Americanward for the first time into two classes: First, large and rich firms that would be able to afford sending a personal representative on a tour throughout the 20 other Republics in order to introduce their goods; and, second, small firms producing an article unique in quality or of intrinsic merit, which they wish to export but do not feel justified in assuming the expense of sending a personal agent to represent them.

We will consider the difficulties that confront these smaller firms first. Four courses are open to them: First, they can conduct



A LATIN-AMERICAN BUSINESS HOUSE.

As a rule this type of exterior incloses a most attractive patio or interior court.

negotiations by correspondence, after having obtained a list of firms that might be interested in selling their goods, nearly always an unsatisfactory method; second, they can get agents to carry their article while representing other firms; third, a number of small firms can combine where their interests do not conflict, and jointly bear the expenses of a traveling representative, or they may put themselves in the hands of any one of the reliable export merchants in New York, New Orleans, or San Francisco doing business in the countries where they wish to introduce their goods.

If the first method here indicated is adopted, the firm contemplating a correspondence commercial campaign will begin by compiling a list of Latin American firms that may handle their specific article.

The office of the Union of American Republics continually receives in correspondence requests for complete lists of firms of Latin America dealing in different articles from pins to ploughshares, from mosquito nets to mine machinery. While from time to time lists of leading merchants and principal business men have been prepared and partial lists of firms dealing in different commodities are always available, still the vast amount of correspondence, editorial, statistical, and other work that daily keeps the office force employed at full speed, makes it impossible at present to take any of the staff for the work of editing a complete list of Latin American laundries, for instance. The writers of letters asking for information of this character seem to overlook the size of Latin America. Given 20 nations varying in size from Salvador, about as large as New Jersey, to Brazil, whose limits would hold all of the United States proper and a slice of Canada besides, and cities differing in degree from Salina Cruz, an important shipping town of 6,000 to Buenos Aires with 1,200,000 of inhabitants and millions of dollars worth of yearly trade, it is apparent that the tabulating of the names and addresses of business firms would be quite a task. Again, many of the merchants in Latin America do business on the general-store line and are not specialists.

However, in spite of the difficulties involved, it is proposed to compile classified lists containing the names of all general and special merchants and manufacturers throughout the 20 Central and South American Republics, and these lists will be ready for distribution within the coming year. In the meantime merchants desiring the names of traders in different lines in Latin America can obtain them from the numerous directories of the cities of South America in the Columbus Memorial Library.

Having acquired a mailing list, next comes the character of letter involved. It must be in Spanish, except when addressed to cities in Brazil, where Portuguese is the language used, or Haiti, when it must be written in French. A remarkable number of people fail to remember that Brazil was originally of Portuguese colonization and not Spanish. The Brazilians are proud of their national idiom. Again, we must take care with the phraseology of the letter. The Latins are by instinct and training polite, and carry their politeness into their business transactions. It is not necessary to explain the customary forms to North Americans—the seemingly extravagant phrases the omission of which makes a letter appear rude to South Americans—all Spanish correspondents are familiar with them. Only be warned against the error of trying to reform the system. Latin Americans do not like being reformed any more than other people. The letter, of course, will be accompanied by circulars or a catalogue which must be in the language of the country. The reader may think this an unnecessary admonition and reflect that it

would show lack of judgment for a firm to send out unintelligible advertising matter, but up to within the last two years it was the almost universal practice for North American firms seeking Latin American trade to flood the country with English catalogues. The fireman running the ferry steamer on Lake Titicaca found them excellent and cheap as fuel. The type of catalogue and circular will be considered under the part of this paper dealing with advertising.

Let us suppose that the correspondence campaign brings results in the way of orders; what will be the next step? Naturally the shipper will want to know the financial standing of the firm he intends dealing with, and in this regard it can be stated that the standard of commercial honor is as high throughout Latin America as in any other part of the world.

There are no publications that give the rating of business houses throughout all Central and South America, although Dun & Co. have been extending their business to Argentina, Uruguay, and Chile.

Under the circumstances the exporter can write to the local bank, which institution will as a rule furnish the information desired, especially if it is stated that the bill will be sent through that bank for collection.

Reassured as to the credit of the consignee, send him exactly what he has ordered, and be sure that the article conforms in every way to the catalogue description. Do not make the mistake of attempting to send him something of higher quality for the same price. He knows local conditions better than you, and above all he knows what he wants. Give it to him. If the inhabitants of the regions of the upper Amazon have a prejudice in favor of lavender undershirts you will not be able to sell them white, even if they be of higher quality at the same price, and more refined. You will only encumber the consignee and close a possible trade field. But do not get the idea that you can not introduce novelties in these countries. Quite the reverse, as Latin America is eager for new ideas of all kinds, only never ignore a prejudice and always ship to order down to the most trifling details. It would be easy to cite numerous examples where with the best of intentions orders have been wrongly filled with disastrous results.

A firm in Para ordered a thousand camp cots according to certain specifications. The house in the West that took the order had just put a newer and heavier article on the market at the same price, and there were other improvements also. A thousand of these new style cots were shipped, but the very improvements made them almost unsalable on the Amazon. Always bear in mind the fact that the man on the spot knows what he can sell best.

Next, let us consider packing. This article would be lengthened beyond all reasonable limits if an attempt were made to detail the mistakes made by exporters in this particular. The inquirer is

referred to a recent report on this subject by Consul W. W. CANADA, of Veracruz. Although the consul seems to make out a strong indictment against American methods of packing, he could in fact have put the case even more emphatically without exaggeration.

Two considerations should guide the shipper: First, the handling that his shipment is about to receive—three or four transshipments of the roughest kind; and second, the possible local use of the package by his customer. A shipment that has to stand a journey of 3,000 miles by boat, rail, river steamer, and mule back has to be packed accordingly, and a barrel that will net your customer $1.25 empty certainly inclines him favorably in your direction.



INTERIOR VIEW OF A TYPICAL GENERAL STORE IN LATIN AMERICA.

These packing precepts are of general application and are only meant to impress exporting merchants with the necessity of intelligent supervision of the shipping clerk whose knowledge of geography may be limited. See that he packs the shipment in a thorough manner, that the box is carefully marked in exact accordance with the custom regulations of the country to which the shipment is made, weights or quantities plainly and correctly indicated, gross, tare, and net (in the metric system preferably), that the invoices are made out in good Spanish, not the soldiers' substitute, and take every precaution to avoid loss by breakage or theft and provide against your customer being fined by the revenue authorities, for such is the constant lament of the consignee of American goods in South America.

Your goods properly packed, next is the matter of shipping. It is simpler to turn the order over to some of the firms doing a direct export business with Latin American countries. Because of the intricacies of Latin American customs systems, it is best to trust specialists, experienced handlers of freight for Central and South American countries, whose names and addresses will be found in the Exporters' Encyclopedia. While on this subject we feel bound to suggest that those who are beginners in the export game, and even those who are experienced in the field, will find much pertinent information in "Elementary Lessons in Exporting," by B. Olney Hough Johnston Export Publishing Co., 135 William Street, New York. The International Union of American Republics publishes a pamphlet entitled "Consular Fees and Invoices of Latin American Countries," which contains practical information on the shipping regulations and invoice fees of the Central and South American countries, and the staff of the office is at present engaged in the most important but exceedingly exacting work of compiling and translating the tariffs of all these countries. The result of these labors will be at the disposition of those interested soon, but until this information is available it is suggested that direct inquiries be made through American consuls or agents resident in the respective countries as to the latest duty on the article in question and the latest rulings of local authorities on doubtful cases. To quote from a trade report:

> The customs regulations in general are very complicated and exacting, and the slightest disregard or misunderstanding of any of them is apt to have serious results. The closest inquiry and closest adherence to minute instructions from men on the ground are therefore absolutely necessary.

The advantages of the metric system are self-evident and the disadvantages of the English system are doubled in a land where the use of the former is almost universal and your trade competitors inform customers that the latter mode of counting is a specious table compiled by the initiated to facilitate false measuring. Unfortunately the activities of some of our minor municipal officials seem to uphold this contention. We believe, however, that the common sense of the American merchant will show itself in the universal adoption of the simpler system shortly.

In the matter of extending credits, discounting bills, collecting, and the strictly financial end of trade, the custom varies so much in different localities that it is impossible to generalize. Again, the merchant must trust the banker, and in compliment to the South American banker it can be said that this trust is rarely violated.

The foregoing hints are intended primarily for the aid of the small merchant first entering the Latin American field, and if they are followed should help him to avoid the costly mistakes of beginners. However, if the manufacturer has only one novelty and a limited

output, it might be simpler for him to turn the whole business over to some reliable export firm which for a minimum of cost would relieve him of a maximum of worry.

The second and third methods suggested in a previous paragraph for enlarging a commercial field, being based on special representation—the same method that would be employed by a large firm—can therefore be considered jointly under the section of this article, which will take up the qualifications of a commercial traveler for success in South America. Before dealing with this subject, however, a few words on advertising are not amiss.

That it pays to advertise is just as true in Latin America as in the United States, and broadly speaking, the same methods that achieve success in this country will bring proportionate results in the Republics to the South of us. As mediums of advertising it may be said that there are several excellent trade papers published in the United States which circulate widely in the Latin American countries. Then of course there are innumerable periodicals appearing in the different South and Central American cities. The office of the Pan American Union can furnish a list of the more important of these on application. Information relative to the advertising rates and the circulation of these periodicals is also available from our files.

It is superfluous to say that original ideas in advertising are greatly appreciated. As an example of how the art of advertising is sometimes practiced, the details of a rather clever scheme that succeeded in getting considerable inexpensive advertising are given. The merchant who was anxious to bring his specialty to public notice (it was a small novelty that would be of almost universal use, arranged in a way that would appeal strongly to the Latin American temperament) sent samples of this article with a polite letter to the editors of different papers, asking them to accept the small gift, and if they felt they could honestly recommend it to their readers the article could be seen in the window of a certain local shop, etc. While this scheme succeeded admirably in the case cited, naturally it is not suggested for universal adoption. Suffice to say that skillful advertising pays.

The most common method of bringing an article to the notice of possible purchasers in the Latin Republics is by means of catalogues and circulars. These should be simple yet attractive with pictures and diagrams wherever possible, and succinct information as to price (generally American gold), express, or freight charges and other important details in each case.

As to the manner of distributing catalogues or circulars it can be done most effectively and economically by the medium of a polite letter, inclosing two or three catalogues, addressed to the American consuls resident in different cities, asking him to place the price lists with some firm that would be interested. The consuls are most

anxious to do all they can to help the American manufacturer and are ever ready to put the sum of their local knowledge at his disposal.

To pass to a discussion of personal representation, it may be stated broadly that the necessary qualifications of a commercial traveler who would succeed in a southern continent are varied and distinct from those that would bring success in this country. It must be remembered that the 20 other Republics are spread over a great section of the earth's surface, and naturally conditions vary and for this reason it is difficult not to generalize when giving advice on this subject. It must be constantly borne in mind that the Latin American point of view is different from that of the Anglo Saxon. They are



SAMPLE OF POOR PACKING.

Shipment of paper as it appeared on arrival at destination.

a people highly sensitive and strongly bound by custom. The tactful traveler will always remember these two points. What North Americans seem to lack in trade intercourse in South America is an appreciation of the value of the purely social or human relations which are inseperable from trade.

The especial qualifications are:

First, a pleasing personal address, for the Latin American sets high store on the social graces. It is the almost universal custom among travelers seeking openings for pushing certain lines to begin what might be called a social campaign, but it must be distinctly remembered that one must be sincere in these social relations, and above

all things to avoid with scrupulous care any attitude that might be in the slightest way considered patronizing. Actual business is seldom, if ever, referred to in the preliminary interviews with a prospective customer, and for this reason it is always necessary to make large allowances in money and time in order to bring about results. Fifteen dollars a day is not high for an expense account in Latin America. Of course the time consumed depends entirely on the amount of country covered. It is also well to remember that an agent is working under peculiar conditions below the Tropic of Capricorn, and the climate has to be taken into consideration. One is never quite so mentally alert under the Equator as 1,500 miles north or south, and tactfulness is at a premium when the thermometer is daily dallying with 90°.

A knowledge of Spanish ranks second in the requisites for success in this field, but it must be stated for the benefit of any who do not contemplate covering all of Latin America that considerable business can be done, especially in Central America, with a limited experience with the Castilian tongue. It is not necessary to repeat that Portuguese is the idiom of Brazil, and French of Haiti. This latter language is also widely spoken in all South America.

A third essential is an acquaintance with the customs of the people, and of this point it is absolutely impossible to give any general rules that would be applicable in all cases.

The above are the three special qualifications of commercial agents in Latin American countries.

In addition to these, of course, he must be a good practical salesman with judgment and discrimination. It is just as necessary to be careful in selecting customers in Central and South America as throughout the United States. One should be particularly careful in the matter of personal conduct. While it has been indicated that there is a great deal of sociability connected with trade, that must not be misconstrued, as the Latin Americans are quick to resent any outraging of the proprieties.

For further specific information the readers of this article are referred to the special trade reports that have been published on nearly all of the South American Republics. These reports are the work of qualified commercial agents, and can be obtained upon application to the office of the Pan American Union.

In conclusion it may be said that the outlook for the advancement of trade in Latin America is distinctly bright. All reports recently received are of an optimistic nature. Of course there is a certain amount of justification in what has been said about the necessity of banks and improvement in freight-carrying facilities, but when it is known that the United States sent $9,500,000 worth of goods to Argentina in 1899, and $43,000,000 in 1909, it must at least be admitted that the American merchant is beginning to get his share.

# GUATEMALAN RAILROAD CONSTRUCTION[a]

THE forging of another link in the great chain which is so rapidly binding together the continents of North and South America began on November 21, 1910, when occurred the inauguration of the work on the Pan American division of the Guatemala Central Railroad between Las Cruces, Coatepeque, and Ayutla, on the Mexican border.

The work, beginning simultaneously at Las Cruces and Ayutla, will be pushed with the expectation of completing it within one year.



COMMENCEMENT OF WORK ON THE PAN AMERICAN DIVISION BETWEEN LAS CRUCES AND AYUTLA.

Clearing right of way, beginning of grade, felling of trees, etc. On this occasion there were present hundreds of distinguished guests and citizens from the surrounding country.

The building in this country of 41 new miles of the great Pan American system marks another era in the progress of Guatemala and will stand an added monument to the energy of President MANUEL ESTRADA CABRERA, through whose efforts it has been made possible.

Already in operation from Santa Maria to Las Cruces are 83.3 miles, which was virtually the first actual piece of track of what was formerly called the intercontinental line—the first link constructed under the survey of that undertaking. The total Pan American

[a] By Edine Francis Tisdel.




RELIEF MAP OF THE GUATEMALA RAILROAD.

On November 21, 1910, work was commenced simultaneously at Las Cruces and Ayutla on the branch-line connecting these two points.

division of the Guatemala Central Railroad will therefore be 124.3 miles, and with the completion of this work Guatemala will be in direct and uninterrupted railroad communication, via Mexico, with the United States. From the capital, Guatemala City, to St. Louis the distance is 2,824 miles, the actual running time 5 days and 18 hours.

The entire division skirts the foothills of the Sierras, and, crossing numerous rivers, the way lies through the beautiful coffee fincas, rubber and cocoa plantations, and rich grazing lands. To the left rise the magnificent volcanoes of Agua, Fuègo, Acatenango, Pacaya,



INAUGURATION OF WORK ON THE PAN AMERICAN DIVISION OF THE GUATEMALA CENTRAL RAILROAD.

The American Minister, Mr. Hitt, in the act of signing the official "acta," which was also signed by the Governor of the Department and by the Minister of Public Works in behalf of the Government of Guatemala.

Atitlan, Siete Orejas, and Santa Maria. The tropical heat is tempered by cool mountain breezes and the balmy air which sweeps in from the Pacific, and the traveler will here find himself well repaid by the novelty and rare beauty of the ever-changing scenes.

By an extension of some 50 miles, soon to be finished from Zacapa to the border of Salvador, Guatemala will also be in communication with her sister Republics on the south. A day not so far distant will see the wonderful Pan American road, 10,116 miles between New York and Buenos Aires, an accomplished fact. Of this 6,444 miles are already in operation and only 3,672 miles are necessary to the

completion of this gigantic task. Many of these in the different Republics are actually under construction, and as each connecting link in the great chain is completed, or commenced with the assurance of completion, it is but natural that some ceremony should mark the importance of such an event.

It was on November 21, the anniversary of President CABRERA'S birthday, that the officials of the Guatemala Central Railroad chose to celebrate the beginning of the work on this important branch, which will make easily accessible a country the commercial advantages and natural beauties of which each day are becoming better known and more appreciated.




GUATEMALA PASSENGER STATION.

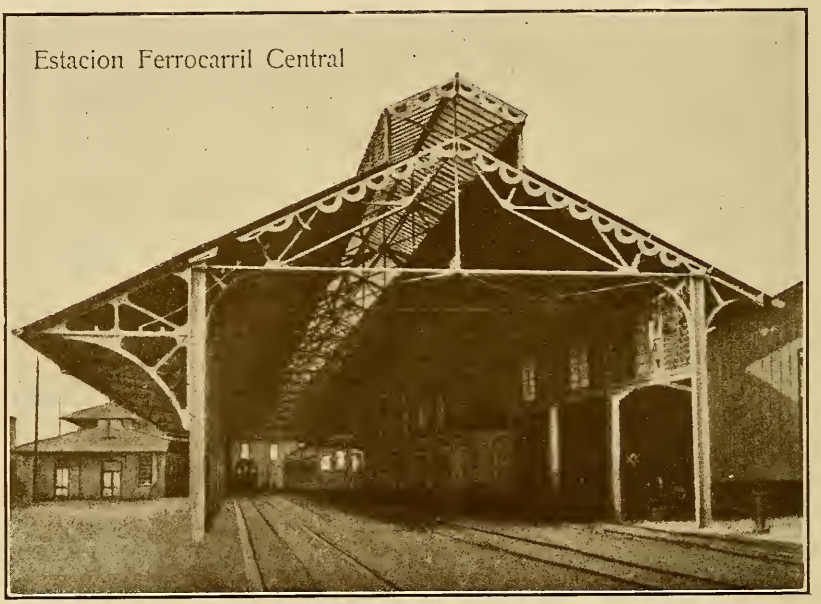
Guatemala Central Railroad.

On Sunday, November 20, at 11 a. m., a special train left Guatemala City with 40 or more invited guests: The Minister of Public Works and his staff, the American Minister and staff, the Consular Corps, representatives of the press, and other prominent citizens.

At every important station along the line great crowds were gathered to greet the distinguished travelers and express their feeling of satisfaction that the Central Railroad had everything in readiness to begin this important work. Municipal authorities with bands of music were at these stations with good cheer and speech making—in fact it was an ovation such as is rarely witnessed in any of the Central American Republics.

Running ahead of the special train was a pilot engine with four coaches, which upon arrival at Retalhuleu were filled with officials and other important people who could not find places in the train reserved for the specially invited guests.

At 8 p. m, at Retalhuleu, 45 persons were entertained at dinner by the company. Many of the guests were from the capital, others being of the municipality of Retalhuleu and Mazatenango, and the governors of several of the Provinces. Speeches of the most complimentary character were made, and the directors and officers of the company were greatly praised for their efforts. Good feeling prevailed, and crowds of people gathered in front of the hotel; bands played, and the city was brilliantly illuminated.




TRAIN SHED OF THE PASSENGER STATION.

Guatemala Central Railroad.

After an early breakfast on the 21st many persons from Retalhuleu and the adjacent towns had taken places in the trains which by 8 a. m. were again on their way. Arriving at Las Cruces at 9 everything was found in readiness for the ceremony, and the official program immediately began.

A beautiful pavilion had been erected and appropriately decorated at the turn-out for the new road. It was immediately filled to overflowing by distinguished speakers, guests of the Government and the company.

Dr. Juan F. Padilla Matute, who had been selected as the orator of the occasion on behalf of the company, made the opening

address, which was well received and applauded. Following Dr. PADILLA came the Minister of Public Works, Don JOAQUIN MENDEZ, who replied on the part of the Government and whose address was suitable to the occasion and most complimentary to the company. The few well-chosen words of the American Minister, Mr. HITT, were enthusiatically received and were followed by an address by the Argentine Minister, Col. BELGRANO. An original poem by Guatemala's most famous poet, Senor CHOCANO, was then read by the author. This was followed by a number of other distinguished speakers present.

His Excellency the President of the Republic, Don MANUEL ESTRADA CABRERA, was accorded great credit for his far-sightedness in making possible the construction of this road and for the earnest



OPENING OF THE PAN AMERICAN DIVISION, GUATEMALA CENTRAL RAILROAD.

First train with which service was inaugurated November 21, 1910.

interest he has taken in this and other lines in his general desire to promote the welfare of the country in every direction, which he has been so successful in doing during the comparatively short incumbency of his exalted office. By many he was heralded as the "Railroad President of the Republic."

At the conclusion of the speeches all gathered en masse at the point of connection between the Central (Occidental) road and the Pan American branch. The first spike was driven by the Minister of Public Works, accompanied by music and cheers, the sounds reverberating through the surrounding hills until the whole country seemed alive with echoes of approval of the work thus appropriately begun. Amidst the sound of music, cheers, and the blowing of

whistles engine 52 of the Pan American Division of the Guatemala Central Railroad then steamed out onto the turn-out.

Upon the return to Retalhuleu a banquet was given in the custom-house by the municipality to 300 guests, and in the evening a grand ball was given in the theater, attended by society, officials of the Government, and other distinguished visitors from every State in the Republic.

The interest of the whole country was centered on the new work which was begun on this memorable occasion with such eclat and which promises to be pushed to a speedy and successful termination, thus cementing by bands of steel the commercial and social relations of the countries to the north and to the south.



# THE MUSEUMS OF THE AMERICAS[a]

## MUSEUM OF LA PLATA, ARGENTINA.

LA Plata, tranquil, dignified, and academic, is one of the youngest cities of America, with a university that, like the city of Buenos Aires, has, from an infant, suddenly become a giant. As Dr. DARDO ROCHA looks back to-day, scanning a period of less than 30 years, he may well be proud of his child; for he is one of the few men who have lived long enough to be introduced to a stranger as the founder of a city. Generally cities have grown, as it were, with a spontaneous growth. Some few like Lima, like Washington, have been founded or planned by an individual. To this number belongs La Plata.

Founded in 1882 by Dr. DARDO ROCHA, the capital of the Province of Buenos Aires has grown to be one of the most important centers of population of the Republic, not commercially, it is true, but scientifically. I say *scientifically*, for that which makes La Plata what it is to us foreigners, at least, is not its halls of Government, but its University. There are many capitals in Argentina; but there is only one La Plata. Its population has increased phenomenally, like that of Buenos Aires; for it is now not far from 100,000, in spite of financial reverses which in the past befell it. Its sumptuous buildings, wide streets, splendid avenues, and beautiful promenades, render this fairy city on the Rio de la Plata one of the finest products of modern Renaissance architecture. Only 57 kilometers distant from the capital of the Republic, it enjoys all the advantages of a suburban town, as well as those of a large city.

The university is younger than the city, for La Plata had existed 23 years, when the former was established on August 12, 1905, Dr. MANUEL QUINTANA being then President of Argentina. It is incredible that within five years such a magnificent institution, with such a wonderful group of buildings should have arisen.

One of the finest ornaments and most useful auxiliaries of the university is the museum. What it took the older nations of the world scores of years to accomplish has arisen in La Plata as if by magic. The museum belongs to the Faculty of Natural Sciences, to which are joined the schools of Chemistry, Pharmacy, Geography, and the Academy of Drawing.

[a] By Rev. Charles Warren Currier, Ph. D.



THE MUSEUM OF LA PLATA, ARGENTINE REPUBLIC.

This Museum, connected with the University of La Plata, forms part of the Department of Natural Sciences, to which are joined the schools of Chemistry, Pharmacy, Geography, and the Academy of Drawing.

The old museum of Buenos Aires had been founded in 1823 by President RIVADAVIA, reaching a point of great importance under the direction of Dr. GERMAN BURMEISTER. As it was found impossible to transport to La Plata the paleontological collection of this museum, the Province ceded it to the Nation, to serve as the basis of a Federal Museum. On the other hand, the archæological and anthropological collections were brought over to the new capital, as the beginning of the museum of the Province. These were the result of the voyages and researches of Dr. FRANCISCO P. MORENO, who, in 1877, donated them to Buenos Aires for the formation of its Anthropological and Archæological Museum, adding to them in the years that followed.



DEPARTMENT OF ZOOLOGY.

This exhibit contains a notable display of contemporary birds and mammals.

In 1884 Doctor MORENO was chosen by the Governor of the Province, Dr. CARLOS D'AMICO, to establish a provincial museum and to be its director. In consequence of this, he at once donated his private library of 2,000 volumes, mainly of American authors and on natural sciences, to the new institution. It will thus be seen that the museum antedates the university. The building was at once begun, and within five years it was possible to install the first collections.

The following year, 1890, Doctor MORENO began the publication of the "Revista del Museo de La Plata," which is published periodically, containing original scientific material with illustrations. Besides this, the museum publishes also the "Anales," with data contributed by the personnel of the institution, and the "Biblioteca," the object

of which is to bring science within reach of the public, by presenting it in popular form.

The museum building, occupying the center of a park, is approached through a stately avenue lined on both sides with shady trees, forming a most agreeable promenade. The edifice, in classic style, terminates at both extremities in a semicircle, the whole having an elliptic figure. The central facade consists of a Corinthian portico, with six immense columns, resting on a platform, to which a flight of steps leads. The decorations, without departing from the Greek lines, possess special features borrowed from archaic American architecture. The great votaries of science, ARISTOTLE, LUCRETIUS, DESCARTES, BUFFON, LINAEUS, CUVIER, HUMBOLDT and many more are represented by their busts, while such American savants and explorers as AZARA, D'ORBIGNY, BOMPLAND and others are not forgotten.

There are two floors in the building, the first one being entirely devoted to the Museum, while on the second, in the center of the edifice, are the administration offices, with the library on one side, and the section of Fine Arts on the other, besides other departments.

As you enter from the portico, you find yourself in a rotunda, the galleries of which, communicating with the second floor, are supported by slender Renaissance columns. The bones of some gigantic antediluvian animal in the center announce the fact that you are entering within the domains of science. This vestibule forms a part of the central parallelogram that divides the building into two equal sections. The upper section of the rotunda belongs to the second floor, with the library and the Fine Arts department to left and right.

The section of the Fine Arts, with its salon of painting and sculpture, affords to Argentinians an opportunity to study the antique by means of a number of reproductions of ancient works. We find, also, a fair selection of good canvases, and the gallery of the rotunda is adorned with a number of casts of classic sculpture.

The outer sides of the first floor, intended to contain what represents a biological ring, from the lowest forms of animal life to man, are divided into 15 large, communicating halls with an area of about 300 to 500 square meters. The central halls belong to various departments of the collection. The several departments represent geology, mineralogy, paleontology, zoology, and anthropology. According to the original arrangements, when the collections were first installed, the greater portion of the wing, on your right, as you enter the vestibule, contained the paleontological collection, with the anthropology of the stone age and nomadic man, and a section of geology and mineralogy. The left wing was devoted to zoology, comparative osteology, and human anatomy.

I had the pleasure of visiting the Museum some months ago, and, if my memory serves me rightly, this arrangement has been modified.

The Americanists spent a pleasant day at La Plata, as the guests of the University, Prof. LEHMANN-NITSCHE and AMBROSETTI being especially prominent in the International Congress. However, a cursory walk through a museum, when so much draws your attention, is hardly sufficient to rivet in your mind those details which must, later on, be supplemented by studying other sources of information.

Important for the labors of a museum are its workrooms and laboratories. At La Plata these are located in the basement, on the level of the ground. During the construction of the building, as soon as a hall was completed, a workroom was arranged beneath, so that the preparation of the collections might proceed at equal pace with the building. Time and money were thus saved.

The Museum possesses also its own printing plant, which undoubtedly is an immense convenience for the publication of its catalogues as well as of its periodicals. Another great advantage to be derived from these facilities for printing is the republication of rare works and the printing of inedited manuscripts, which are thus placed within reach of all those interested in scientific matters, and which could not otherwise easily be obtained. This surely is not the least advantage offered by the Museum of La Plata to a public eager for knowledge, nor is the advantage limited by the frontiers of the Argentine Republic, becoming, as it does, the property of all countries.

The great intrinsic value of the Museum of La Plata is essentially South American, by the material it has collected for the study of the fauna and flora, fossil, as well as actual, of the austral regions of the Western Hemisphere, but especially for the opportunities it offers to make a thorough study of American man, from the earliest prehistoric period. This reconstruction of man's history is artistically exhibited in the large paintings in the lower portion of the rotunda, in which one sees archaic lands, scenes from Tierra del Fuego and Patagonia, as well as of other portions of the Republic, and restorations of aboriginal and savage life.

The natural history of Argentina is, of course, the prominent feature of these collections. Beginning with the earliest period of biological research, you will find here the uncertain phases of life of the primary formations, in specimens collected in the Provinces of Mendoza and San Juan, mollusks and trilobites of the Silurian age, with plants of the Carboniferous period, jurassic mollusks from the "Puente de Inca," on the Argentine cordillera, crustaceans and fish from Mendoza, San Luis, and Patagonia, besides gigantic fossils of Dinosaurians from the southern portion of the Republic. The collection of Patagonian mammals of the Tertiary period is of especial



DEPARTMENT OF PALEONTOLOGY.

Semirotunda, showing collection of Argentine fossils, particularly Marsupials and Edentates.

interest to the paleontologist, not to speak of the fauna, discovered by Darwin at Monte Hermoso, forming a link between the higher strata of the Patagonian Tertiary epoch and the Quaternary of the Pampas. Horses of the Pampas, with their precursors of past geologic epochs, are among the interesting objects that will attract the attention, not only of the man of science, but also of the casual observer and of the curious visitor. It is not my intention to enter into technicalities nor minute descriptions which would prove wearisome to the average reader, and I therefore refrain from further details concerning the fossil remains of Argentina, so numerous in the collections of this remarkable Museum. The scientific man needs not this article, as the publications of the Museum furnish all details on the specific object of his research. General outlines suffice for our purpose.

The biological collections, beginning with skeletons and comprising various forms of animal life, are such as are found in all good museums, with the superadded value that they illustrate particularly the life of the most southern portion of the American continent. Studied in connection with the excellent zoological garden at Buenos Aires, the collection at La Plata affords a splendid opportunity to become familiar with animal life in the far south.

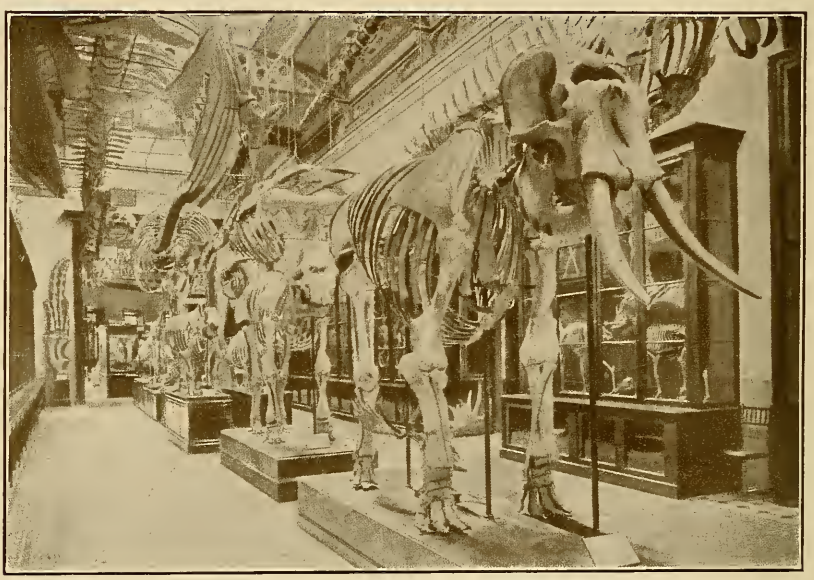
As regards man, you have every opportunity to study him well and thoroughly, from his skeleton to his modes and habits of life. A section of the science of man is devoted to anatomical anthropology. The museum began with a collection of 1,000 skulls and 80 skeletons, of which nine-tenths belonged to South America. They represent man from the glacial period down to the most recent Indian. It is quite probable that man, at various epochs, found himself driven by force of circumstances to the extreme south, and it thus happens that one finds in Argentina the remains of the gigantic Patagonian, such as excited the admiration of MAGELHAENS, as well as types said to be similar to that of NEANDERTHAL. For Patagonian anthropology the Museum of La Plata can not be surpassed. You may here study the remains of the late Patagonian, as well as of his *dolichocephalous* and *macrocephalous* predecessors. Add to these the Araucanian race, as well as the aboriginies of Chaco, ancient Peruvians and Bolivians, and the Guanches of the Canaries, and you will form an idea of the opportunities for study offered at La Plata.

One hall of the museum is literally filled with crania of all descriptions, containing, I am sure, the finest collection in existence of South American skulls at least. These are invaluable for a study of cranial deformations, such as the flattening, which have existed and which still exist among various races of mankind. Doctor MORENO tells us that from a number of prehistoric cemeteries to which he had access in South America he obtained the most complete collection possible

of such deformed crania of all known types and of every epoch of immigration.

Another branch of anthropology of which the museum makes a specialty is that of the history of civilization. You will find here implements of the stone age, from Uruguay, from the Provinces of Cordoba and Buenos Aires, and from Patagonia, that are quite unique, besides a section devoted to the prehistoric man of Europe for comparative study.

These remains of human industry appear to carry one back to a very remote antiquity. For instance, at excavations made for the port of La Plata bones of extinct animals were found that appeared to have been carved by man, at an epoch when the region must have



DEPARTMENT OF ZOOLOGY.

Anatomy and osteology exhibits.

been entirely different from what it now is, and at Rioja fragments of pottery were discovered at a depth of more than 60 meters. On the cordillera, near the pass traversed by San Martin on his memorable passage of the Andes, Doctor Moreno found the image of a glyptodon painted on the walls of a cavern. When it comes to determining the antiquity of man, the scientific value of such discoveries may be left to experts who, as a rule, are by no means harmonious in their conclusions, but further and more positive data must be awaited. Into such controversies and the sifting of opinions I have no wish to enter here.

Neither has the moment arrived when certain conclusions as to the prehistoric relations between the Eastern and Western Hemispheres

can be reached by a comparative study either of skulls or monuments. Yet museums like that of La Plata are accumulating material that may pave the way for such conclusions by its collection of American antiquities with resemblance to those of peoples across the seas. At the same time, American philologists like Señor LAFONE Y QUEVEDO, the present Director of the Museum of La Plata, may, in course of time, produce a science of American comparative philology that may go far toward bringing the American races together or even connecting them with those of the Old World.

The Museum is also rich in material for the study of the prehistoric civilization of the Andes, which stretched down along the eastern slopes of the great chain into what is now the Provinces of Mendoza and Jujuy, in the Argentine Republic. The Province of Jujuy alone has furnished an immense collection to the Museum. Doctor LEHMANN-NITSCHE, director of the archaeological and ethnological sections of the Museum, regards his collections as absolutely unique. The only other place, he says, in which he has found antiquities from Jujuy is the ethnological museum of Berlin, where a valuable collection exists, made by the well-known archaeologist Doctor UHLE, who is at present director of the National Museum of Lima.

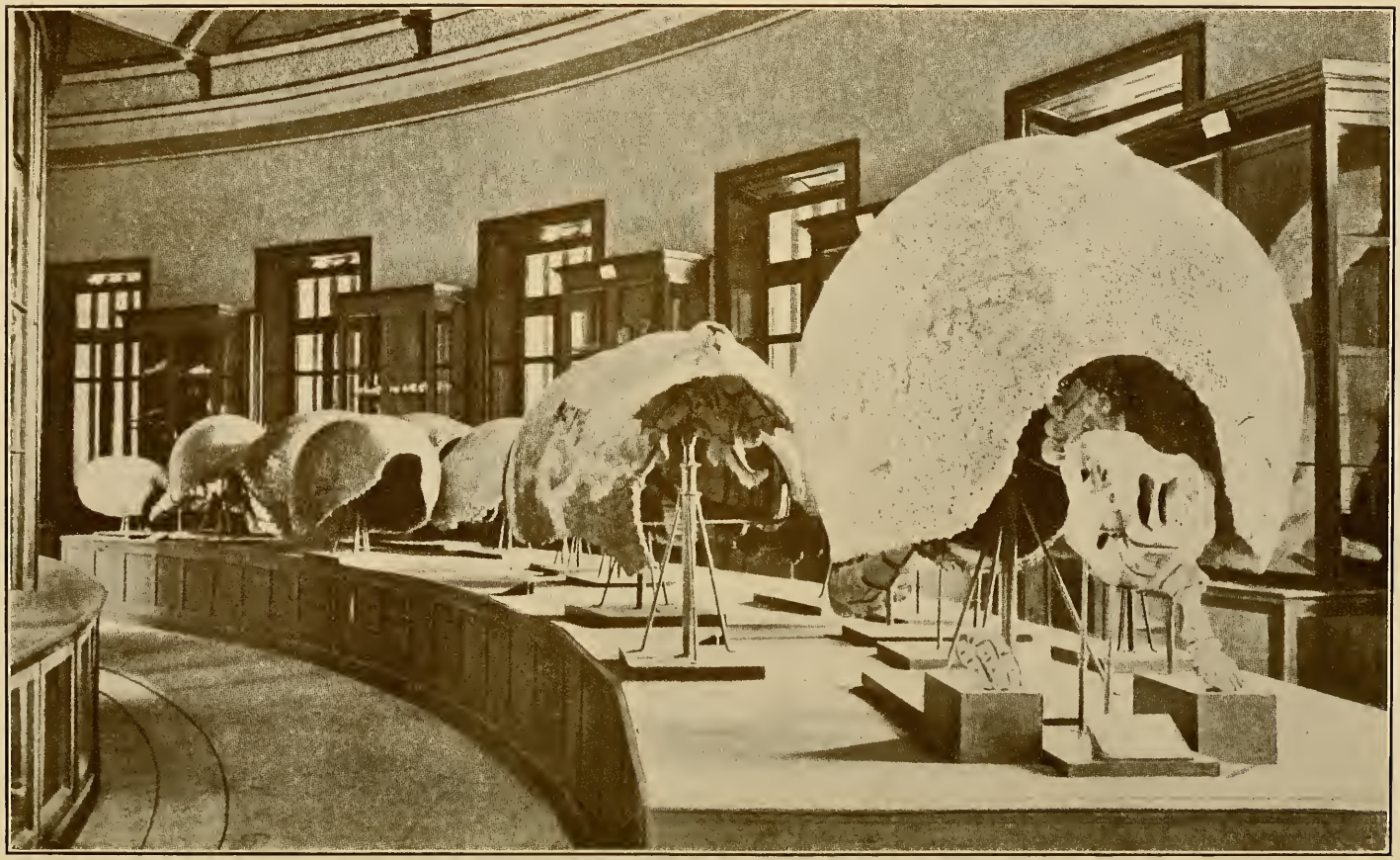
From the heights to the west of the Republic, toward the frontier of Chile, the *Puna de Atacama*, the Museum has obtained an interesting collection, due to the explorations of Señor GUILLERMO GERLING in 1897 and 1898. There are evidences of an extensive population once having inhabited these regions, and human habitations have been discovered as high as 18,000 feet. Doctors MORENO and AMBROSETTI believe that climatic conditions must have greatly changed in the course of centuries, since there are indications of agriculture and of the cultivation of maize, where now a temperature of four below zero has been observed in December, which is the summer month in the Southern Hemisphere.

This collection contains objects of wood and bone besides pottery.

Speaking of pottery reminds me that the museum has had some difficulty in preserving its ceramic collections from the effects of saltpeter, which, I believe, has been overcome by adopting a method followed by Professor AMBROSETTI, practically the same as that recommended in Egypt by FLINDERS PETRIE.

For the study of the pre-Inca civilization of Peru, a very large collection of pottery from the dead city of Gran Chimu, near Trujillo, may serve to cast some uncertain rays upon the dark period that preceded the arrival of the Incas, the period to which such ruins as those of Chimu, Pachacamac, and Cajamarquilla belong.

Bringing the study of civilization down to the colonial epoch, we find at La Plata a very interesting collection, gathered from those Argentine provinces, and from Paraguay, which were the scenes of



DEPARTMENT OF PALEONTOLOGY.

Semirotunda containing collection of Pampean edentates, among which are included a number of Glyptodons characteristic of this part of South America.

the famous Jesuit missions that lasted to the end of the eighteenth century. Of especial interest are the works of art of the Guarani Indians, produced under the direction of their Jesuit guides. A special style was thus created, partaking of the Jesuit renaissance, and of aboriginal forms. It is to be regretted, says MORENO, that so little attention has been paid to an epoch of splendor which once existed in regions now almost deserted. Few have tried to save anything from the wreck, and consequently only a few remnants of this Jesuit civilization exist, scattered about in private collections. The scarcity of such objects must therefore enhance the value of the collection in the museum of La Plata.



DEPARTMENT OF ANTHROPOLOGY.

Anatomical, anthropological, and craniological exhibit with a vast collection of crania.

To sum up, we find, in this splendid institution, a monumental history of South American, but especially of Argentine man, from the earliest dawn of civilization to the present day. We are brought from the dim age of stone and the nomad, through the mysterious civilizations of the Andean plateaus and valleys, to the modern aboriginies, the remnants of a vanishing race. We study American history in stone, and in the handiwork of the past, in textiles, pottery, utensils, and weapons, until we reach our own times. At La Plata we have especial opportunity to study man as he has existed from the confines of Brazil and Bolivia down to the Antarctic regions of the Land of Fire.

The nucleus of these various collections were those of Doctor MORENO, but they have been extended by the acquisition of others,

such as of Doctor AMEGHINO, of Buenos Aires, and by various scientific expeditions. To these belong, for instance, the archæological explorations of the Province of Catamarca made for the Museum by Don ADOLFO METHFESSEL, before the year 1892, and another of 1902–3, for which we owe an account to that learned and amiable gentleman whose English is as perfect as that of any Englishman, Dr. SAMUEL A. LAFONE QUEVEDO, the present Director of the Museum. Doctor LAFONE is, I believe, partly of English descent.

The explorations of Mr. HAUTHAL, in southern Patagonia, in 1900 have resulted in the addition to the La Plata collection of several interesting stone implements, taken from the cave of Markatsh Aiken, about 6 leagues from Puerto Gallegos. The general appearance of these objects would seem to indicate the Paleolithic period. Besides, some remains were found in the cave in a semifossilized condition, apparently belonging to extinct animals.

The Museum of La Plata is constantly increasing in importance, promising in course of time to become one of the most important in the New World. Buenos Aires is now in direct communication with the principal ports of Europe and with New York, and as facilities of communication are augmented, as they are bound to be, the Museum of La Plata, with its scientific treasures of South America, will become more accessible to scholars from all parts of the globe, to their great advantage and to the glory of Argentina.

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# PANAMA—ITS FUTURE OPENINGS FOR AMERICANS[a]

ONE of the interesting questions that I think it would be wise for the people of the United States to take into consideration in connection with the building of the Panama Canal is the future disposition of the force of employees, among which are a great many Americans, now engaged in the building of the canal and the railroad operations in the Canal Zone, who will lose their positions. The total number of employees, from report under date of March 3, 1910, including the Panama Railroad Co.'s force, was 38,732 men. From now on, as the work has reached what might be termed the apex, there will be a gradual reduction in the force of employees. A great many of the laboring men are West Indians from the various islands, many of whom will return to their former homes. In addition to this enormous force, there are also a great many all through the Canal Zone who have taken up homes, dependent upon the requirements of this force. What is to become of these men? Of this total, which represents only able-bodied men (their families would largely increase this number), is it possible to find homes in the Republic of Panama, and could they have a reasonable chance of making life a success? First, would the Republic of Panama, as now constituted, welcome such permanent settlement? From my own experience, undoubtedly they would. In several talks with President AROSEMENA, of Panama, he expressed a very great desire for the Anglo-Saxon race to find settle-



MR. BERNARD N. BAKER.

[a] By Bernard N. Baker. Photographs by A. G. Snyder, United States Consul General at Panama.

ment on the lands of the Republic as a means of developing its resources; and also in conversation with a number of other leading Panamanians the same opinion seemed to prevail—that it would be very desirable, and welcomed by them; that the natural position which our own Government must always have in its investment in the Panama Canal would be a subject of great interest and one that would never lessen with time; consequently, they must always look to our country as a natural ally for the sovereignty and protection of their own country.

One day, when I had the pleasure of calling on President AROSEMENA, a fine, sturdy looking American named SCOTT came in and requested an interview. He stated that he had been a shovel engineer, working on the Panama Canal for four years, and that he



PRESIDENT TAFT INSPECTING LOCKS AT PEDRO MIGUEL, PACIFIC DIVISION, PANAMA CANAL.

Colonel Goethals, in white suit, is standing behind the President, facing front.

was from Huntingdon, Pennsylvania. During his holiday seasons he had returned home several times and found that he suffered from the climate so much that he determined, if he could get some encouragement and the necessary land in the Republic of Panama, to make a permanent settlement. He and three other engineers with their families were in a somewhat similar position, and had agreed to become permanent settlers in the Republic after the completion of their work. He had been authorized by them to visit the lands in the northern part of the Republic with a view to making homes for themselves and settling there. He stated that he had made a trip to the north, to David, and found the opportunities there so encouraging that he determined to settle if he could secure the land from the Government on reasonable terms and also secure

protection. After he left I discussed this question thoroughly with President Arosemena and he told me that such changes could be made in the laws as might be necessary to allow Americans to own land in the Republic. The present law, I understand, prevents this unless a citizen of the Republic of Panama has the same rights in the United States as a citizen of the United States would have in the Republic of Panama. He assured me that this law, he felt, would be remedied and the question covered by an act of the Assembly.[a]

The question of annexation is one that has never been considered, as they know the United States does not desire such a measure; but they would certainly welcome keen interest by the United States in all that would lead to their betterment and progress. Does the opportunity exist for successful development of the resources



AT THE PACIFIC DIVISION OF THE PANAMA CANAL.

President Taft talking to Division Engineer Williamson.

of Panama through the Anglo-Saxons joining with the people of Panama? I believe undoubtedly it does.

There are a great many important questions that must be considered. One of the most important at the present time is the proposed development of the country by railroad facilities. The Canal Commission, at the request of the Panamanian Government, has surveyed a line from Empire, a point on the Canal Zone, to the town of David, about 280 to 300 miles, and only about 30 miles from the Costa Rican boundary.

At the time of writing, the complete report of the engineers is not available; but in a talk with a number of the engineers in a general way there seemed to be great differences of opinion as to the desirability of building such a line and the opportunity after

[a] The National Assembly has since enacted a law permitting citizens of the United States to own land in the Republic.

construction of its being made profitable. There are many difficulties to be overcome in the construction of the line. Although the first section of 20 or 30 miles after leaving the town of Empire would not offer opportunity for immediate development, yet after this has been passed to the northward, in the Province of Chiriqui, there seems, from a study of the subject, a very great opportunity.

The raising of horses and cattle has been remarkably successful. It is a fine, open country, with enormous areas of pasture lands, offering great possibilities in the stock-raising industry. There are also in that section many large coffee plantations being successfully conducted by Americans. The opportunities in timber and lumber are also great. Already one American has established a mill for the manufacture of lumber and has built his home in the midst of the



AT THE PACIFIC DIVISION OF THE PANAMA CANAL.

President Taft and party on inspection tour.

timber section and on the line of the proposed railroad. That the mineral resources are great has never been questioned, and the finding of a very large number of valuable gold ornaments in the old Indian tombs indicates that at one time this country must have produced large amounts of gold.

Then, too, this railroad would furnish a natural link in the proposed Pan American line which some day must be realized.

Agriculture in the Tropics is always a difficult problem, and one will always find great differences of opinion among residents of the Canal Zone and surrounding territory in regard to this. I am informed, however, that there is a small plantation of only 5 acres devoted especially to truck gardening near the town of Empire, in the Canal Zone.

The owner of this plantation informed me that his net profits from these 5 acres in supplies sold to the Canal Zone would average $10 per day. Two young men from the States, and both of them from Baltimore, have started in a very energetic way, and I believe a very successful way, a plantation of 500 acres, situated on the east side of the canal near Panama, which they are now developing They are now planting 100,000 coconut trees, in addition to large quantities of banana trees, and clearing the land to raise alligator pears and vegetables of all kinds.

The Republic of Panama very naturally is particularly anxious to see the proposed railroad built. The opportunities for building it now are probably very much better than they would be after the canal is completed, because necessarily the Canal Commission has



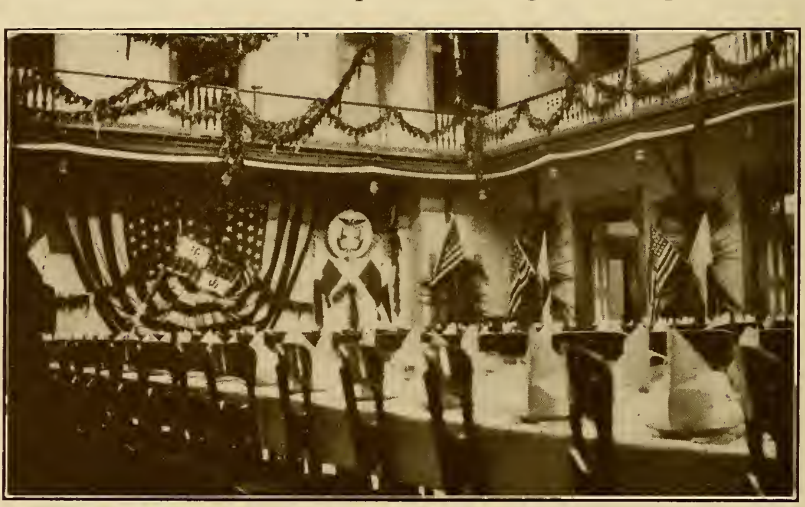
ANOTHER VIEW OF THE LOCKS AT PEDRO MIGUEL.

Seated at President Taft's left is Division Engineer Williamson.

a very great deal of railroad equipment and material that will become useless as the canal nears completion. They also have a large construction force, with equipment, which can be utilized by the railroad, whereas after the canal is completed all the material necessary for construction and equipment of a railroad line would have to be imported, and this would add very great additional expense to the undertaking. Besides, I believe the Republic of Panama would greatly prefer, through its administration and assembly, to make arrangements with American interests to build this railroad rather than with those of Europe, because they know the interests of the United States must necessarily always be with them on account of their large investment in the Panama Canal. Consequently concessions would be made by the Republic of Panama on much better terms to American than to any other foreign interests. The people of the Republic

have been imposed upon so often by foreign corporations, and also by self-seeking interests among themselves, that they would welcome any honest, just proposition from an American syndicate, and would assist as far as they possibly could with their limited resources in the matter of securing bonus, as well as large land grants, for a syndicate undertaking the construction of this railroad.

In addition to this I am sure they would pass such laws as would fully protect the future of the interests. And then this would give an opportunity for settlement and for the development of the most desirable sections of the Republic of Panama by the Americans and others who will lose their occupations through the completion of the



HALL DECORATED FOR BANQUET TO PRESIDENT TAFT.

During his recent visit to the Canal Zone, President Taft was tendered a banquet by President Arosemena of Panama.

canal. Naturally, in selecting the route for the construction of the canal the one through the lowest sections of the Republic was chosen. Consequently, it lies in the section of warmest climate, whereas in the provinces to the northward there is high land with a very desirable climate and also large savannahs, or prairies, very similar to those in the western part of the United States, of high elevation, fine climate, and capable of growing all the fruits and produce of the Tropics, as well as those of the more temperate zones. All down the west coast of South America on the high plateaus the same conditions exist, showing the possibilities for fruit culture throughout the entire year.

# LATIN AMERICAN TRADE

THE trade and financial depression which began in the latter half of 1907 and culminated a few months thereafter extended from the United States over all the commercial world. The effects of this depression in Great Britain and on the continent of Europe were as great as in the United States itself. In Latin America, however, while there was in every one of the Republics more or less of a loss in trade, the effect in general was less than in other parts of the world, and was shown principally in decreased importations for the year 1908. These decreases extended into 1909. In spite of this more or less widely extended depression of trade in Latin America, if a comparison be made of the trade for a five-year period, there will be shown a remarkable growth both in exports and imports. Generally speaking, all of the commercial countries of the world have participated in this improved Latin American trade, but none of them to the extent of the United States.

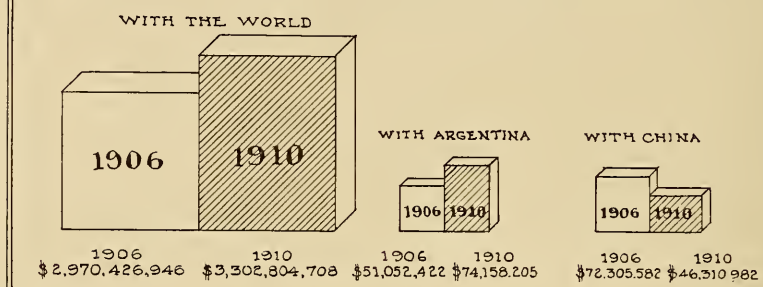
The trade of the United States with Latin America for the year beginning July 1, 1905, was $498,737,814. For the year ending June 30, 1910, the figures were $630,692,378. This shows an increase of $131,954,564, or 26.4 per cent, of which the increase in imports was $99,154,341 and in exports $32,800,223. For the same period, the trade of the United States with China suffered a most decided decline, amounting to $25,994,600. This amount represents a decrease in exports to China of $27,453,763, offset by an increase in imports of $1,459,163. The totals of imports and exports of the Chinese trade for the two years were:

| | 1905–6 | 1909–10 |
|---|---|---|
| Imports | $28,531,207 | $29,990,370 |
| Exports | 43,774,375 | 16,320,612 |

The foreign trade of the United States with the whole world for the year ending June 30, 1910, was $3,302,804,708. Of this amount the trade with Latin America represented nearly one-fifth—to be exact, 19.1 per cent. The imports from these countries were more than one-fourth of the total imports of the United States, i. e., 25.1 per cent, an increase from 23.8 per cent, the proportionate amount five years before.

| | |
|---|---|
| Total imports of the United States | $1,557,819,988 |
| Total imports from Latin America | 391,440,511 |

# UNITED STATES TRADE

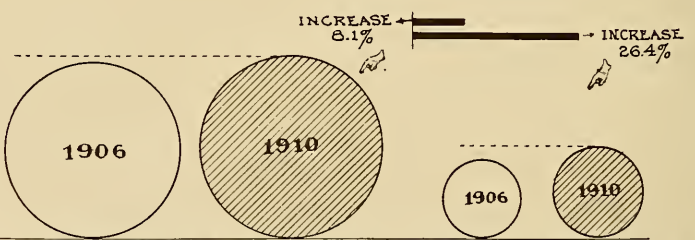



## IMPORTS FROM LATIN AMERICA

| | | |
|---|---|---|
| 1906 | 292,286,170 | |
| 1910 | 391,440,511 | |
| | 99,154,343 | INCREASE |
| 1906 | 18,379,063 | ←FROM ARGENTINA |
| 1910 | 33,463,264 | |
| | 15,084,201 | INCREASE |
| 1906 | 28,531,207 | ←FROM CHINA |
| 1910 | 29,990,370 | |
| | 1,459,163 | INCREASE |

## EXPORTS TO LATIN AMERICA

| | | |
|---|---|---|
| 1906 | 206,451,644 | |
| 1910 | 239,251,867 | |
| | 32,800,223 | INCREASE |
| 1906 | 32,673,359 | →TO ARGENTINA |
| 1910 | 40,694,941 | |
| | 8,021,582 | INCREASE |
| 1906 | 43,774,375 | →TO CHINA |
| 1910 | 16,320,612 | |
| | 27,453,763 | DECREASE |




$2,471,689,132 $2,672,112,330
TOTAL TRADE OF THE U.S. OMITTING LATIN AMERICAN TRADE.

$498,737,814 $630,692,378
UNITED STATES TRADE WITH LATIN AMERICA

NOTE:— YEARS ENDING JUNE 30 —

PAN AMERICAN UNION

F.H. Loody

The exports to Latin America in 1910 represented 13.7 per cent of the total export trade of the country, an increase from 11.8 per cent, the figure for 1906.

| | |
|---|---|
| Total exports of the United States | $1,744,984,720 |
| Exports to Latin America | 239,251,867 |

The value of the trade of the United States with Latin America and its growth during the last five years is made more apparent if, from the total trade of the United States, the trade with Latin America be subtracted and the comparison be then made of this trade with that with the remaining part of the world. Omitting Latin America, the total trade of the United States increased from $2,471,689,132, for the year beginning July 1, 1905, to $2,672,112,330, for the year ending June 30, 1910—an increase of $200,423,196, or 8.1 per cent. The trade with Latin America for the same period, as is shown above, increased nearly $132,000,000, or 26.4 per cent.

Separating the trade into its two constituents, imports and exports, the imports of the United States from the world, omitting Latin America, increased $232,103,201, or 24.8 per cent, in the five-year period.

| | |
|---|---|
| Total imports of the United States, omitting those from Latin America, 1909–10 | $1,166,379,477 |
| Total imports of the United States, omitting those from Latin America, 1905–6 | 934,276,276 |

The imports from Latin America for the same period increased $99,154,341, or 33.9 per cent.

| | |
|---|---|
| Imports from Latin America, 1909–10 | $391,440,511 |
| Imports from Latin America, 1905–6 | 292,286,170 |

The exports of the United States to the world, outside of Latin America, in the five-year period decreased $31,680,003, or 2.1 per cent, while the exports to Latin America for the same period increased $32,800,223, or 15.9 per cent.

| | |
|---|---|
| Total exports of the United States, omitting those to Latin America, 1909–10 | $1,505,732,853 |
| Total exports of the United States, omitting those to Latin America, 1905–6 | 1,537,412,856 |
| Exports to Latin America, 1909–10 | 239,251,867 |
| Exports to Latin America, 1905–6 | 206,451,644 |

# RECEPTION OF SEÑOR CASTRILLO AS MINISTER FROM NICARAGUA

THE BULLETIN takes pleasure in extending a cordial welcome to the Minister from Nicaragua, Dr. SALVADOR CASTRILLO, who was received by President TAFT on January 10, 1911, at the White House. The presenting of the Minister's credentials and their acknowledgment by the President were characterized by the simple yet impressive ceremonies customary on such occasions. In his capacity as diplomatic representative of one of the countries of the International Union of American Republics, Doctor CASTRILLO will of course occupy a place on the Governing Board of the Pan American Union.

The new Minister is a lawyer of learning and ability, and has been several times honored by his country with official appointments. Born in Rivas, Nicaragua, in 1873, he was educated in that Republic and in Costa Rica. In the latter part of 1888, Doctor CASTRILLO went to Switzerland, where he continued his education and commenced his legal studies. These he concluded at the Universities of Paris and Geneva. From 1895 to 1897 he traveled extensively through Europe and published several literary essays in French.

Returning to his country in 1897, he was made Consul of Brazil in Nicaragua. This post he held for a few years, and then resumed his practice of law, being honored with an appointment as Acting Attorney General.

In December, 1910, Doctor CASTRILLO was appointed Envoy Extraordinary and Minister Plenipotentiary to the United States. In presenting his credentials at the official reception, the Minister delivered the following speech:

Mr. PRESIDENT: I have come to present to you the autograph letter of the Constitutional President of Nicaragua, which accredits me to your Government as his Envoy Extraordinary and Minister Plenipotentiary.

The mission with which I have been intrusted by General ESTRADA could not be more gratifying to me; to restore, through your Government's benevolence, the official relations of my country with the United States and maintain them in perfect harmony and cordiality.

It will be my aim to represent the patriotic longings and aspirations of the Nicaraguans and also to promote in my country, for our improvement and instruction, a better knowledge of the ideas of true democracy and liberty governed by law and order, which prevail here and have developed the type of citizen to be found in this glorious country.

The Nicaraguans admire very highly the American people as the enthusiastic supporters of noble causes and of the efforts in struggles made by mankind in the defense of its sacred rights.

The long period of agitation in my country is over. I believe that with the inauguration of the Constitutional régime we have finally entered the path of order and progress. With the regeneration of the citizen prosperity will come, thanks to the reorganization of our public treasury on the foundation of honor and integrity in the management of the national wealth.

I venture to assert, as regards external affairs, that in addition to the close relations we shall foster with this great Republic, we shall maintain peace and harmony with the other nations; and particularly with the Central Republics, whose origin and future are the same as ours, shall we march onward united by our common interests and the ever-growing and stronger sentiments of fraternity.

Mr. President, it affords me special pleasure to express, in the name of the President of Nicaragua and my own, sincere wishes for the even greater glory of this Nation, whose generosity equals its power, and for all the happiness that falls to the lot of a human being upon you who so worthily presides over its destinies.

President TAFT replied as follows:

Mr. MINISTER: It is a source of great satisfaction to me that the course of events in Nicaragua has so shaped itself as to enable our two countries to resume the formal relation and the cordial intimacy which so long existed in the past and which so auspiciously promise to develop and grow closer in the future. It is especially gratifying that I am privileged to be the instrument by which to effect the renewal of friendly intercourse by receiving from your hands the autograph letter of the Constitutional President of the Republic of Nicaragua whereby you are accredited to this Government in the capacity of Envoy Extraordinary and Minister Plenipotentiary.

During the dark days through which the Republic of Nicaragua has recently passed the Government and people of the United States have been solicitous onlookers, watching and hoping for a fortunate ending of the contest which unhappily divided the people of Nicaragua into hostile factions and for the speedy restoration of fraternal peace between citizens of one blood. Our people have felt sympathy for the efforts of the Nicaraguan people to work a lasting reform in the administration of their cherished Republic; to make it in fact as in name a Government of the people; to restore and perpetuate the rule of justice, and to renew the foundations of that durable friendship that should exist and grow stronger between the kindred Commonwealths of Central America. This laudable effort finds its culminating expression in the announced purpose of the Constitutional Executive to whom the people of Nicaragua have intrusted the destinies of the Republic to restore civil peace and economic order in Nicaragua by the establishment of constitutional guaranties and by the rehabilitation of the finances of the country; to fulfill sincerely all international obligations as well toward the sister Republics of Central America as toward the outer world; and to undo the unrighteous acts of the past administration which the free citizens of Nicaragua have so justly condemned and emphatically driven from arbitrary power. In whatsoever may contribute to the full realization of these high aims the renewed Republic of Nicaragua can rely upon the friendly assistance of the Government of the United States and the warm sympathy of our people, whose only desire is to see peace, justice, and prosperity prevail in all the neighboring Republics and to feel assured that the priceless possession of popular liberty, won by their peoples at the cost of blood and treasure, shall be steadfastly defended and left as an untarnished legacy to the generations to come.

It it my purpose, in furtherance of these desirable objects, to send forthwith to Managua a duly accredited Minister of the United States, whose relations with the Constitutional Power of the Republic will complement and enhance the cordial intercourse which I bespeak for you at this capital.

For yourself, Mr. Minister, I wish all success in your mission, and the enjoyment of health and happiness, and I ask you to convey to President ESTRADA my personal wishes for his welfare and for the well-being of the Nicaraguan Republic.

# BOOK NOTES

"**The Incas of Peru.**" Pp. 443. With illustrations and map. By Sir CLEMENTS MARKHAM, New York, E. P. DUTTON & Co., 1910. Price $3.

This is the latest of the long list of books which the veteran author of the foregoing work has given us on the land of the Incas. It is also the most suggestive and in many respects the most interesting. It makes us regret that advance of years—he has passed his eightieth birthday—has forced him to abandon the idea he once entertained of writing a detailed history of the famous "Empire of the Children of the Sun." Certainly, outside of the late MARCOS JIMENEZ DE LA ESPADA, the distinguished Americanist who brought to light so many valuable manuscripts that had so long lain in dusty Spanish archives, no one of the present generation is more competent to write on the history and land of the Incas than the author of the work before us. For, besides being quite familiar with the country of the people with which the book deals, having traversed it in various directions and spent considerable time in both Peru and Bolivia, he has, for the past half century, been writing about the same country and people that constitute the subject-matter of his latest book.



SIR CLEMENTS R. MARKHAM, K. C. B., F. R. S., F. S. A.

His first work on Peru—"**Cuzco and Lima**"—appeared in 1856, and since that date volume after volume has come from his busy pen, nearly every one of which was related to the same topics so admirably treated in his crowning achievement, "The Incas of Peru."

But valuable as has been his various works on Peru, they are, in our opinion, of less importance than his splendid series of annotated translations of the old Spanish chroniclers, published by the Hakluyt Society. Through these he has put the English reader in possession of the chief sources of early Peruvian history, and has made him familiar in a way that was otherwise impossible, with the leading Conquistadores and their immortal achievements in Andean lands from Panama to Patagonia. Among the most precious of these translations are those of "The Chronicle of Cieza de Leon," and the "Royal Commentaries of the Inca Garcilasso de la Vega." These were followed in rapid succession by "Reports on the Discovery of Peru," by XERES and ASTETE; "Rites and Laws of the Incas," by MOLINA; "Antiquities of Peru," by the Indian, SALCAMAYHUA; "Narrative of the Idolatry and Superstitutions in Huarochiri;" "Report of Polo de Ondegardo," on Indian administration; "Natural History of the Indies," by ACOSTA; "Voyages of Pedro Sarmiento," and "History of the Incas," by SARMIENTO.

But long as this list is and invaluable as are the works mentioned for the student of early Peruvian history, it embraces but a part of the translations that this indefatigable author has prepared for the press. Besides these, he has placed in the vaults of the Hakluyt Society, ready for publication, translations of MONTESMOS, BALBOA, BETANZOS, SANTILLANA, MARTIN DE MORNA, and BLAS VALERA, the long anonymous author from whom MONTESINOS and GARCILASSO DE LA VEGA drew so much of their material.

Besides having traveled extensively in Peru and made himself familiar with the early chroniclers by translating the most important of them, Sir CLEMENTS has mastered the language and literature of the Incas. The extent of his labors in this direction is attested by his "Contributions for a Quichua Grammar and Dictionary," published in 1864, his "Revised Quichua Dictionary," published in 1908, and the elegant translation of the old Inca drama entitled "Ollantay," which is given in full in his latest work.

From the foregoing, it will be seen what a vast literature has been bequeathed to us by the old Spanish chroniclers, a literature that was almost unknown in the English-speaking world until CLEMENTS R. MARKHAM more than a half century ago began the arduous but praiseworthy task of presenting it to us in an English dress. It will also be seen how well he has been equipped for his latest work, which in a measure rounds out in a beautiful fashion all that he has hitherto produced.

PRESCOTT once declared that "no history could be quite satisfactory unless the author was personally acquainted with the localities he had to describe." An illustration of the truth of this statement is given in the brilliant historians' "Conquest of Peru," where, describing PIZARRO'S voyage on the Pacific, near Piura, Peru, he tells us that the Spaniards never lost sight of—

> the mighty Andes, which * * * were seen at nearly the same distance from the shore, rolling onward, peak after peak, with their stupendous surges of ice, like some vast ocean that had been suddenly arrested and frozen up in the midst of its wild and tumultuous career. With this landmark always in view, the navigator had little need of star or compass to guide his bark on her course.

Had PRESCOTT been able to visit this part of Peru he would never have written the paragraph from which these utterly erroneous statements are taken, for he would have known that the Cordilleras at this point are lower than at any place between Colombia and the Strait of Magellen, and that their crest is here nearly 2 miles below snow-line. For singularly enough it is precisely at this extraordinary depression in the great Andean range that has been located the route of the contemplated railroad from Paita to the Amazon, below the Pongo de Manseriche. In the case of Sir CLEMENTS, who is so thoroughly familiar with the topography of Peru, and its chief physical features, such a mistake would have been impossible. Similar errors in the description of localities occur in other parts of the "Conquest of Peru," all showing how well founded was the observation of its author regarding the necessity of personal acquaintance with the country one would describe.

It is this fact that, in addition to his knowledge of the language and history of the Incas, the author of the work before us has such an intimate and exact knowledge of the geography of their country, which gives to "The Incas of Peru" a special interest and value. And one sees at a glance that the writer knows how to marshal his facts in the most telling manner and how to utilize his knowledge for the benefit of his readers.

The first chapter of the book is entitled "The Tellers of the Story," and is a succinct but just and critical estimate of the early chroniclers and historians of Peru. In detailed knowledge and accuracy of judgment it recalls JIMENEZ DE LA ESPADA'S masterly Prologo to CIEZA DE LEON'S "Guerra de Quito" in the "Biblioteca Hispano-Ultramarina." In it he gives a merited tribute to the soldier-historian, who "stands first in the first rank of authorities on Inca civilization."

The second part of CIEZA'S work, bearing the title of "Relacion de la Sucesion y Gobernio de Incas, señores naturales que Fueron de las Provincias del Peru y Otras

Cosas Tocantes á Aquel Reino, para el Ilustrisimo Señor D. JUAN DE SARMIENTO PRESIDENTE DEL CONSEJO DE INDIAS," was owing to the substitution by a copyist of the word *por* for *para*, the cause of PRESCOTT's attributing the authorship of it to SARMIENTO when, as a matter of fact, it was only dedicated to him by its real author, CIEZA DE LEON. From information given by JIMENEZ DE LA ESPADA, shortly before his death, we may hope to see published in the near future the whole of CIEZA's great work, for we are assured that the manuscript copy, that was so long supposed to be lost, is still in existence, and in the hands of one who has the intention and the means to give it to the world at an early date. This will be by far the most important publication in recent times on the early history of Peru, for as JIMENEZ DE LA ESPADA proves, HERRERA, ZARATE and others have for centuries been receiving credit for work that they copied almost word for word, and without recognition, from CIEZA DE LEON.

In this interesting chapter reference is made to the "Descripcion de las Indias," written by REGINALDO DE LIZARRAGA, a Dominican monk, about 1907, by Don CARLOS ROMERO in the "Revista Historica," of Lima. It is remarkable, among other things, for containing what is evidently the correct account regarding MANCIO SERRA DE LEGUISAMO's having gambled away the great image of the Sun in a single night.

Hitherto, it has been supposed that this image was the great one in the temple of the sun in Cuzco, about which ancient and modern writers have waxed so eloquent, but according to LIZARRAGA, the image, which fell to the lot of MANCIO SERRA, was a small one engraved on a gold covering for a receptacle, in the temple of the Sun, into which were poured offerings of chicha. The large image was never found, for it was effectually concealed with other treasures before the arrival of the Spaniards at Cuzco.

But of far greater importance is another work with the title "Nueva Cronica y Buen Gobierno," found in 1908, in the Royal Library of Copenhagen. It is the production of an Indian, Don FELIPE HUAMAN POMA DE AYLA, whose mother was a daughter of the great Inca YUPANQUI. The book is—

> a very thick quarto of eleven hundred and seventy-nine pages, with numerous pen-and-ink sketches, almost one for every page. * * * The portraits of the 12 Incas are each accompanied by a page of description. The great value of the portraits consists in the excellent drawings of dresses and weapons. Portraits of the COYAS or QUEENS follow, and then those of 15 famous captains. About 60 pages are devoted to the ordinances and laws, with a picture of the Inca surrounded by his councillors. Each month of the calendar is given, illustrated by pictures in which the exact shapes of agricultural implements are shown, among other things. Then come details of the Huacas or idols, divination, fasts, interments, and very graphic representations of the punishments for various offenses. There is a chapter on the "Virgins of the Sun," with an illustration, and several Quichua harvest, hunting, dancing, and love songs. HUAMAN POMA next describes the places and gives an account of the occupations of the people at various ages.

In addition to all this there is much matter relating to the conquest, and a fearless exposure of the injustice and cruelty with which the author's countrymen were treated by the Spaniards. In anticipating the reception that would be accorded to his book, when given to the world, HUAMAN POMA declares:

> Some will weep, others will laugh, others will curse, others will commend him to God, others from rage will want to destroy the book. A few will want to have it in their hands.

From the brief notice given of it by Sir CLEMENTS, it is safe to say that a great many will desire to have a copy of it, and it is grateful news to all lovers of history that this—

> without exception, the most remarkable as well as the most interesting production of native genius that has come down to our time, is in good and sympathetic hands, and will soon be given to the world.

In the second and following chapters of "The Incas of Peru," the author discusses the vexed questions regarding the origin and antiquity of the megalithic ruins of the great Andean Plateau, notably those of Tiahuanaco. Here, at an elevation of 12,930 feet above sea level, there are the ruins of a great city covering a large area, built by highly skilled masons, and with the use of enormous stones. One stone is 36 feet long by 7, weighing 170 tons; another 26 feet by 16 by 6. Apart from the monoliths of ancient

Egypt, there is nothing to equal this in any other part of the world. The movement and placing of such monoliths point to a dense population, to an organized government, and consequently to a larger area under cultivation, with arrangements for the conveyance of supplies from various directions. There must have been an organization combining skill and intelligence with power and administrative ability.

This, then, is the mystery. A vast city containing palace, temple, judgment hall, or whatever fancy may reconstruct among the ruins, with statues, elaborately carved stones, and many triumphs of masonic art, was built in a region where corn will not ripen and which could not possibly support a dense population. It is quite certain that in the time of the Incas the people were absolutely ignorant of the origin and history of these edifices. They were to them, as they are to us, mysterious ruins.

The great antiquity of these and other similar ruins on the Andean Plateau, and especially certain ruins in Cuzco, Ollantaytambo, Chavin, Concacha, and Cuelap, is shown not only by their masonry and symbolical carving, but also by

the advances made by the Andean people in agriculture and in the domestication of animals. * * * Maize had been brought to a high state of cultivation, and this must have been the result of careful and systematic labor during many centuries. The cultivation must have been commenced at so remote a time that it is not even certainly known from what wild plant the original maize was derived. The wild potato, however, is known. It is a small tuber about the size of a filbert, which has scarcely increased in size after a century of careful cultivation. Yet the Andean people, after centuries of such cultivation, produced excellent potatoes of several kinds, for each of which they had a name. The same may be said of the *oca* and *quinua* crops. The agricultural achievements of Andean man are evidence of the vast antiquity of his race in the same region. The domestication of the llama and the alpaca furnish additional evidence of this antiquity.

There is no wild llama. The huanuca and vicuña are different animals. It must have been centuries before the llama was completely domesticated, carrying burdens, yielding its wool for clothing and its flesh for food. Individuals are of various colors, as is usual with domesticated animals, while the wild huanucas have fleeces of the same color. The domestication of the alpaca must have taken an equally long period, and called for even greater skill and care. There is no wild alpaca, and the tame animal is dependent on man for the performance of most of its functions. It must have taken ages to bring the silken fleeces to such perfection.

These evidences of the antiquity of the people who formerly inhabited the extensive tablelands of the Andes show that we must perforce abandon GARCILESSO's long accepted story of Inca civilization, for it is totally inadequate to account for the great age of the ruins in question or to explain the agricultural and pastoral facts just adduced. It was simply impossible for such progress to be made during the reign of the 12 Incas mentioned by GARCILASSO in his genealogy of the Children of the Sun, and we are therefore driven to revise the long current conclusions respecting Incan civilization, and to seek for an explanation of the mysterious facts in other sources of information.

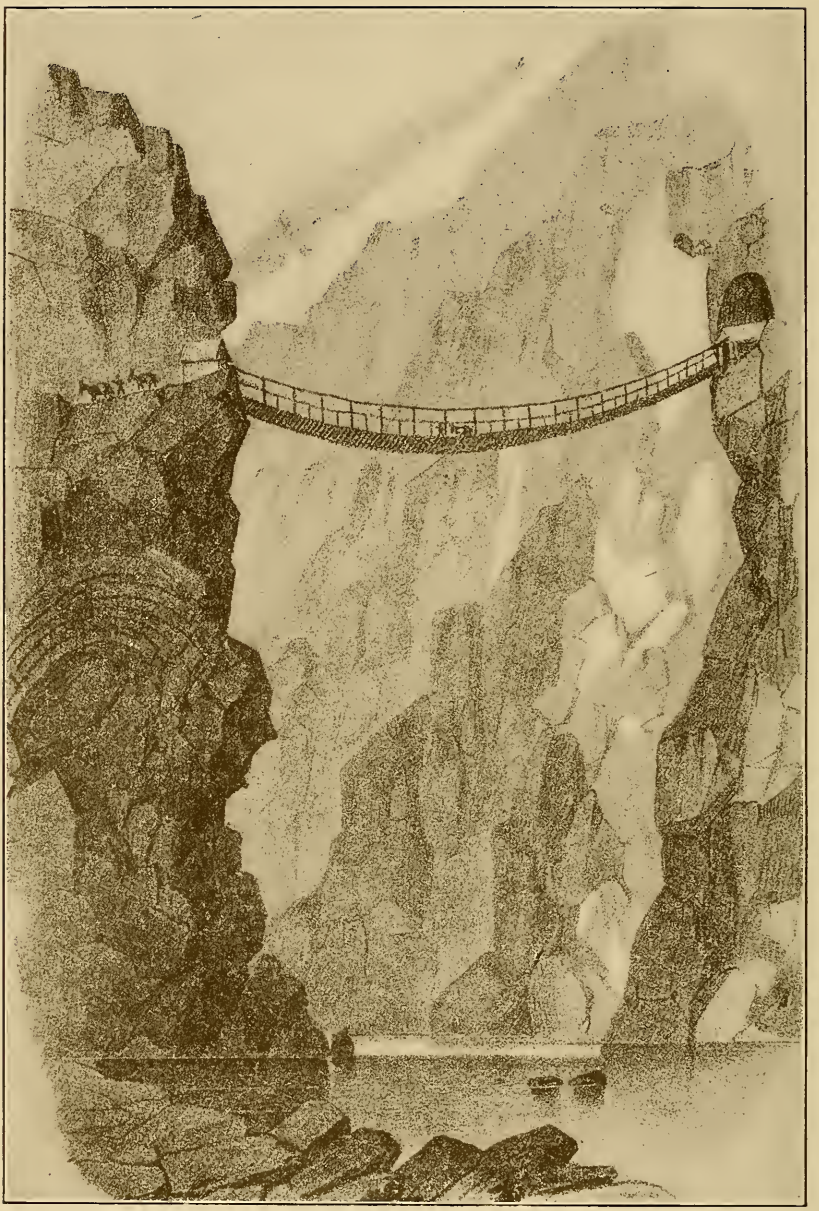
The genealogy of the long discredited MONTESINOS, who got his list of kings from BLAS VALERA, who was a mestizo, and who received his information directly from the learned men—Amautas and Quipucamayocs—who had charge of all genealogical records, is now appealed to and seems to throw some light on the questions raised, at least as far as time is concerned. If authentic, it would carry back the history of Peru to nearly a thousand years B. C. This would allow ample time to explain many of the facts referred to, but it would not suffice to explain the difficulties presented by the climatic conditions which now prevail at and around Tiahuanaco.

How could a region—

where corn can not ripen, sustain the population of a great city over 12,000 feet above the level of the sea? Could the elevation have been less? Is such an idea beyond the bounds of possibility?

As geology teaches, the Andes are comparatively modern. This is evinced, among other things, by the discovery of the bones of a mastodon at Ulloma, in Bolivia, at an elevation of 13,000 feet above the Pacific.

But such an animal could not have existed at such an elevation. Then, again, in the deserts of Tarapaca, embedded in the sides of ravines, there are numerous skeletons of gigantic anteaters, animals whose habitat is in a dense forest. When they lived the deserts in which their bones are found must have been covered



BRIDGE OVER THE APURIMAC RIVER IN THE ANDES OF PERU.

Sketched in 1852 by Lieut. Lardner Gibbon, United States Navy.

with trees. It is the height of the Andes, wringing all moisture out of the trade wind, which makes Tarapaca a desert. When the Andes were lower the trade wind could carry its moisture over them to the strip of coast land which is now an arid desert, producing arboreal vegetation and the means of supporting gigantic anteaters. When mastodons lived in Ulloma and anteaters in Tarapaca, the Andes, slowly rising, were some 2,000 or 3,000 feet lower than they are now. Maize would then ripen in the basin of Lake Titicaca, and the site of the ruins of Tiahuanaco could support the necessary population. If the megalithic builders were living under these conditions, the problem is solved. If this is geologically impossible, the mystery remains unexplained.

Mr. LEONARD DARWIN, president of the Royal Geographical Society, seems inclined to claim for the ruins of Tiahuanaco an antiquity of 4,000 years—about the same as that of the pyramid of Cheops—and, if this be granted, it is possible that at the time the great city on the Titicaca Basin was built the plateau was much lower than at present and adapted for supporting the large population that once existed there.

But whatever be the ultimate solution of the various problems raised by the megalithic structures on the Andean Plateau, there can be little question regarding the existence of an ancient empire which "extended its sway over the Andean regions from an unknown distance south of Tucuman to Chachapoyas, with Tiahuanaco * * * as its center of rule and thought." Whether the rulers of this empire were the Piruas and Amautas—the two pre-Incan dynasties of MONTESIMOS and BLAS VALERA—is to be determined by future researches. But what can be no longer doubted is that civilization in Peru long antedates the arrival of the mythical MANCO CAPAC and his sister-wife on the shores of Lake Titicaca, and that much of the credit for industrial and social progress which has so long been given to the Incas, must henceforward be bestowed on those—

megalithic people of a megalithic age—an age when cyclopean stones were transported, and cyclopean edifices raised.

The destruction of the old civilization in a great battle, and the subsequent disruption, with the preservation of some remnant of civilization at Tampu-tocco, the place of refuge, explains * * * the superiority and predominance of the so-called Children of the Sun * * *. It may be that the Pirua and Amauta dynasties may possibly represent the sovereigns of the Megalithic empire. Its decline and fall was followed by centuries of barbarism, so that the people had almost forgotten its existence, while the tribes of the Collas were probably of another race, descendants of the invaders. As the Bible and the literature and art of Greece and Rome were preserved through centuries of barbarism by the monasteries, so the religion and civilization of the Megalithic empire were preserved through centuries of barbarism by the Amautas of Tampu-tocco. In one case the dark period was succeeded by the age of the Renaissance, in the other by the enlightened rule of the Incas.

But, not only must we entirely modify the hitherto accepted views regarding the antiquity of the Peruvian people, but we must also modify those which have so long obtained respecting the condition of the inhabitants under Inca rule. From the time of ROBERTSON and PRESCOTT it has been always assumed that the whole fabric of Peruvian civilization—

was originated and matured by the Incas, constructed, as it were, out of chaos. But a more recent school of thinkers has seen the impossibility of such a creation, and holds that the Incas only systematized tribal and social organizations which had existed from remote antiquity, but did not create them.

Such is the view of the Peruvian author, Don VICTOR BELAUNDE, in his notable work "El Peru Antiguo y los Modernos Sociologos." Such also is the conclusion of the German sociologist, CUNOW, as given in his "Organization of the Empire of the Incas." The conclusions of the Belgian sociologist WILLIAM DE GREEF, as well as those of Don BAUTISTA SAAVEDRA, a Bolivian, and Don JOSÉ DE LA RIVA AGUERO, a Peruvian, are essentially the same as those of BELAUNDE and CUNOW.

According to CUNOW there had existed from remote antiquity separate groups organized on the same base as the village communities of India and the German mark. These were the *ayllus*. He holds that the *ayllus*, as village communities, existed before the empire of the Incas. The Incas respected this *ayllus* organization, and all they did was to systematize it. BELAUNDE holds that this hypothesis has caused a complete revolution in the manner of considering the rule of the Incas.

And yet more. Recent investigations show that we must likewise greatly change the views that have so long prevailed respecting other features of Incarial government.

Chief among these are the so-called Virgins of the Sun, and the highways that connected the different parts of the empire.

Certain writers would have us believe that the women, called by the Spanish conquerors Virgins of the Sun, were not unlike in profession and mode of life the nuns of the Catholic Church. Thus KOTZEBUE, who but reflects a generally received opinion, does not hesitate to speak in his drama, "A Virgin of the Sun," of the vows of these women, when as a matter of fact they made no vows, and chastity with them was only relative, not absolute. Strange as it may appear these women, outside of those of the blood royal, were, as we learn from POLO DE ONDEGARDO, nothing more than a tribute exacted by the Incas, and subject to his service and disposition as ordinary goods and chattels. And the buildings in which these women were kept, far from being anything like the convents of the Catholic nuns, as is frequently imagined, were nothing more than storehouses sheltering a tribute of women. Had the Spanish conquerors used the Quichua names for these women, and their abodes, viz: *aclla-cuna* and *acllahuasi*, the chosen ones, and the house of the chosen ones, instead of Virgins of the Sun and convents, from a fancied resemblance to institutions with which they were familiar in their own country, the many erroneous notions which have so long prevailed regarding them would never have obtained currency.

Equally misleading have been the accounts that have come down to us regarding the Inca roads. Sir CLEMENTS, we are sorry to see, has little to say about them himself, but refers us for information respecting them to certain of the early chroniclers, and later historians, who have copied from them.

According to these chroniclers, whose assertions regarding the length and character of the Inca roads all modern historians have accepted unquestioningly as veracious statements of fact, there were two great highways, one on the plateau and one along the coast, extending from the northern frontier of Ecuador to Chile, and measuring more than a thousand leagues in length. The road on the Andean tableland was, we are assured by GOMARA, 25 feet wide—

> cut in some places from the living rock and in others made of stone and lime, and went in a direct line, without turning aside for hills or mountains, or even lakes, a work which all agree exceeded the pyramids of Egypt and the paved ways of the Romans, and indeed all other ancient works.

For one who has traveled the length and the breadth of *Intahua-ntin-Suyu*—the official name of the Inca Empire—who has crossed the Andes repeatedly between Quito and La Paz, and who, outside of Cuzco and a few other places, has sought in vain for vestiges of these famous roads, on which chronicler and historian have for four centuries exhausted all their powers of description, as has the writer of these lines, nothing could be further from the truth than the accounts that have so long been unhesitatingly accepted concerning the ways of communication in the land of the Children of the Sun.

From what we have said respecting the antiquity of Peruvian civilization and monuments, it is clear that if such roads as those described ever existed they were chiefly the work of pre-Incaic peoples or of the tribes conquered by PACHACUTI, whom MARKHAM regards as "the greatest man the American race has ever produced," and HUAYNA CAPAC, his almost equally illustrious son.

Our views on the subject of Inca roads are briefly but clearly stated by BANDELIER, who writes of them as follows:

> Roads of ancient make exist in various places, but they are not after a general plan and not connected. These roads are wide trails. I have seen them often in the course of eleven years' explorations, and have found them to be ways of communication between neighboring tribes, made by these tribes previous to the Inca sway. Bitter are the complaints of the early Spaniards when they describe their first march to Cuzco over the absence of trails, even in the vicinity of that settlement.

When we read of the Incan highways as pictured by the early chroniclers, whom modern historians have taken too literally, we are apt to think of them in connection with our splendid macadamized roads, as if such means of communication were com-

mon, even in Spain, at the time of the Conquest. The fact is, however, that Spanish roads during the reigns of CHARLES V and PHILIP II, even in the vicinity of some of the largest cities of the peninsula, were in a shocking condition, little better than bridle paths, and almost as impassible as those existing in Scotland less than two centuries ago, of which LECKY gives such a graphic account in his "History of England in the Eighteenth Century."

We can well imagine that the Spanish soldiers under PIZARRO found some of the Peruvian trails along which they passed quite as good as, if not better than, many of the roads with which they were familiar in the mother country. And as they were wont to exaggerate the wonders of the countries they conquered, as they also exaggerated their feats of arms, it was not for them a difficult flight of the imagination to report that the roads of the Incas were equal if not superior to the best of ancient Rome and that as monuments of human achievement they took rank with the greatest in the land of the PHARAOHS.

How modern writers could ever have seriously believed that the Incas, without iron or steel tools—their so-called hard-tempered bronze tools are a myth—and without explosives of any kind, were able to build roads that would to-day tax the ingenuity of our most competent engineers with all the resources of modern invention at their command, is a mystery that we make no attempt to solve. Truth to tell, such a road as GOMARA describes would to-day be considered a more difficult and more costly undertaking than the section of the great Pan American Railroad stretching from the northern frontier of Ecuador to the southern boundary of Bolivia; and if not an absolutely impossible task, it would bankrupt ten times over all the Republics on the west coast of South America. Nevertheless for four centuries the world has credited, and is still asked to credit, the accounts of the early chroniclers about the marvels and magnificence of roads which could in the very nature of things never have had any existence outside of their very fertile imaginations and those of the Münchausen companions of the Conquistadores.

One could have no better illustration of man's credulity than this particular case, except perhaps the readiness to accept as true statements like the following, from DRAPER'S "History of the Intellectual Development of Europe."

> After an attentive consideration of the facts in the case, I agree in the conclusion of CARLI that at the time of the conquest the moral man in Peru was superior to the European, and, I will add, the intellectual man also.

Compare this strange statement with the views of MORGAN in his "Ancient Society," and FISKE in "Discovery of America," not to speak of others who have recently made a special study of the grades of culture of the divers Indian tribes of North and South America, and we shall find how wide of the mark DRAPER was in his estimate of the social status of the Children of the Sun. To declare that the Incas, who had no phonetic alphabet, no written records, no knowledge even of smelting iron ore, were civilized in the true acceptation of that term, is to give to the word civilization a meaning that exact usage does not warrant. The Incas, it is true, had made distinct progress in agriculture and pastoral life; they had erected structures that still command the admiration of the beholder, although they were ignorant of the arch and never got beyond the thatched roof, even in their grandest palaces and temples—*pace* KOTZEBUE, who speaks of a temple with a dome—but they were never, as FISKE has truly observed, more than one stage higher than our Mohawks, and never above the status of culture attained by the lake dwellers of ancient Switzerland.

While we can not always agree with the author of "The Incas of Peru," we are, nevertheless, grateful to him for his interesting and suggestive book. It is sure to dissipate many erroneous notions that have so long obtained regarding the ancient Peruvians and to contribute materially toward a more exact and more comprehensive knowledge of what was undoubtedly the most interesting, the most progressive, and the most humane of the indigenous races of the Western Hemisphere.



Photograph taken January 1, 1910. March 1, 1910. May 25, 1910.

THREE STAGES IN THE CREATION OF THE PLAZA DEL CONGRESO, BUENOS AIRES, ARGENTINE REPUBLIC.

This magnificent Plaza, completed in the remarkably short period of five months, was one of the chief centers of attraction during the recent Centennial Celebration of the Argentine Republic. The park extends over an area of 75,672.59 square yards, and involved an expenditure of $5,190,352.86, United States gold, distributed as follows: Cost of expropriated land, $5,095,200; paving, $58,424.96; electric lighting, $22,503.80; making gardens and incidental expenses, $14,224.10.

"**The Argentine Republic. Its Physical Features, History, Fauna, Flora, Geology, Literature, and Commerce.**" By A. STUART PENNINGTON. . . . New York, FREDERICK A. STOKES COMPANY (1910). 340 p. Illus. Fold. Map. 5½ by 9 inches. *Price $3.*

Much has been written upon the theme "Argentina" of late, and from the number and excellence of the volumes dealing with this land of promise recently reviewed in these columns, one would be led to believe that there was little left to tell concerning the Argentine Republic.

But the book before us negatives such idea, for the author has collated a wealth of information that can not be found in any other one volume, and weaves in a weighty subject many skeins of lighter colored history that add a charm to his style.

To say that to write about a country one must have resided therein, sounds trite, but one may live without observing, and few are gifted writers. The author is a keen observer, a stylist of no mean ability, who takes up the task of describing his foster country after a twenty years' residence. Surely no one could have better qualifications.

That the book is written to please English more than Argentine readers is apparent from pardonable pride with which the author records the achievements of the Anglo-Saxon in "Silver Land."

The story of this South American Republic is a stirring one and out of a past of trial a vigorous man-country has emerged to take its place in the front rank with the foremost nations.

Mr. PENNINGTON tells the tale of the country's growth well, concluding his narrative with a chapter on "Life in Argentina" that should be of great help to any one going to this land of wonderful future.

His figures on the "Cost of Living" are timely:

The cost of living may be judged from the following items, reckoning a shilling as being equal to 60 cents paper:

| | | |
|---|---|---|
| Beef | 40 to 60 cents per kilo | 4d. to 6d. per pound. |
| Mutton | 30 to 50 cents per kilo | 3d. to 5d. per pound. |
| Bread | 24 to 26 cents per kilo | 2d. to 2½d. per pound. |
| Butter | $1.50 per kilo | 1s. 2d. per pound. |
| Potatoes | 10 to 20 cents per kilo | 1d. to 2d. per pound. |
| Tea | $1.75 per pound | 3s. per pound. |
| Coffee | $2 to $4 per kilo | 1s. 6d. to 3s. per pound. |
| Sugar | 38 cents per kilo | 4d. per pound. |
| Milk | 20 cents per liter | 4d. per quart. |

Coal (average in Buenos Aires $7.50 gold), or £1 10s. 0d. per ton.

The book can be recommended as the work of a serious and practical man.

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"**Le Crédit et le Régime Hypothécaire de la République Argentine et dans le Nouveau Monde**" (**Etude Économique et de la Législation Comparée**). By E. S. ZEBALLOS, former Minister of Foreign Affairs, Worship, Public Instruction, and Justice, of the Argentine Republic. Member of the Permanent Arbitration Tribunal of The Hague, and Corresponding Member of the Institute of Comparative Law. Brussels. Publishers, F. VAN BUGGENHOUDT. 1910.

The law collection of the Columbus Memorial Library has received a valuable addition in this recent work of Mr. ZEBALLOS which, partaking of the character of a financial exposé and of comparative law, is an exhaustive treatise on the civil code of the Argentine Republic, as well as of the other South American Republics and the United States, especially in its relation to the mortgage system in force in each country.

In the opening chapter Mr. ZEBALLOS furnishes some interesting figures showing the remarkable economic development of Argentina and also its phenomenal increase in population. In 1908, for instance, the foreign commerce of Argentina amounted to $738,978,077. Mr. ZEBALLOS refers to the very small part the United States has taken in Argentina's development in comparison with other foreign countries, although

within recent years it has become a successful competitor of Europe. Mortgage banks have played an important rôle in this economic development and in the improvement of the conditions of the inhabitants of Argentina, for the general rate of interest on loans made by the national banks varies from 5 to 7 per cent, while the lowest usury rates obtainable are 1 per cent a month, and in some of the out-of-way interior towns 2 and 3 per cent a month is obtained.

Argentina numbers 35 banks of discount, including 2 large national discount and mortgage banks, besides 2 German, 4 English, 3 Italian, 3 Spanish, and 3 French banks. The banking business of these institutions is several times larger than that of all the South American countries combined.

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"**The Antiquities of Manabi, Ecuador. Final Report.**" By MARSHALL H. SAVILLE . . . New York (Irving Press), 1910. (12) 284 p. Fold. Map. 104 plates. Size 9½ by 13 inches. (Contributions to South American archeology, the GEORGE G. HEYE Expedition.)

The second volume and final report of the GEORGE G. HEYE Expedition deals with that phase of South American archeology embraced in the study of the antiquities of Manabi, Ecuador.

Mounds in the Cerro Jarboncillo region, a range west of Porto Viejo, were opened and considerable material, valuable in the study of prehistoric habits, unearthed. Axes, hammers, polishing stones, pottery, spindle whorls, chairs, and obsidian mirrors were among the utensils found, indicating a high state of civilization for the people of this section.

A comparative study of the material recovered indicated that the inhabitants of Manabi were little influenced by the Incasic culture, but the question: Who were these people? still remains unanswered. That they were skilled in the ceramic art and sculpture is shown from the comprehensive collection of antiquities here described and illustrated, and Professor SAVILLE hopes that further investigations will perhaps help in identifying this race.

The author promises a further volume dealing with studies he intends to make in Esmeraldas, and it is to be hoped he will be rewarded in his search for a clew to help classify the people of old Ecuador.

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"**The Life and Times of Miguel Hidalgo y Costilla.**" By ARTHUR HOWARD NOLL . . . and A. PHILIP MCMAHON. Chicago, A. C. MCCLURG & Co., 1910. front. (port.), viii, 200 p. 4½ by 7 inches. *Price $1.*

The people of Mexico have placed this priest first in the ranks of the nation's heroes, and as the exponent of an ideal he is entitled to his enviable niche in history.

That he failed in his purpose of freeing Mexico from Spanish domination is true, and also he shared the fate of the many martyrs to world movements, yet in spite of ignominous personal failure he is now honored as a Father of Liberty because he was the father of a cause.

It is a curious anomaly that historians get an insight and appreciation of the strong character of this "revolutionist" from the records of the institution which condemned him.

The stories of his trials clearly show him to have lived before his time, and died, but not in vain.

The authors treat their subject sympathetically, and the book will be read with pleasure by all interested in Mexican history.

"**The Official Directory of Mines and Estates of Mexico. General Description of the Mining Properties of the Republic of Mexico, in Which is Included a List of Hacienda and Ranches**" . . . By JOHN R. SOUTHWORTH. Mexico, JOHN R. SOUTHWORTH, 1910. 263 p. Illus. Size, 10 by 13 inches. (Text in English and Spanish.)

A volume dealing with the great and partially developed resources of the United States of Mexico, giving a description of the present condition and future possibilities of the most important mining enterprises and largest estates of the Republic.

The book also contains a copy of the Mining Law of Mexico in the English and Spanish text.

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"**The Double Cross. A Romance of Mystery and Adventure in Mexico of To-day.**" By GILSON WILLETS. New York, G. W. DILLINGHAM Co. (1910c). 370 p. Illus. Size 5 by 7½ inches. *Price $1.50.*

A thrilling tale with the principal scenes laid in Mexico, where adventure follows adventure, leaving the reader breathless in an effort to solve the riddle of the story.

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"**Almanach de Gotha. Annuaire Généalogique, Diplomatique et Statistique, 1911.**" Gotha, JUSTUS PERTHES, 1911. xxiv, 1,258 p. Plates. Size 4 by 6 inches.

This book appears in the usual convenient form and shows the same careful editing that is characteristic of these volumes. Its importance is so universally conceded that no further comment is necessary.

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"**Hazell's Annual for 1911.**" . . . Edited by HAMMOND HALL. London, HAZELL, WATSON & VINEY, 1911. lix, 592 p. Size 5 by 7½ inches. *Price $1.50.*

Containing a record of current events of world-wide interest in an accessible form.

The editors are to be considered as benefactors of the busy man in thus preparing an authoritative volume which is a mine of useful information that he can have ready to hand.

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"**Francisco. Our Little Argentine Cousin.**" By EVA CANNON BROOKS. Boston, L. C. PAGE & Co., 1910. ix, 152 p. Illus. Size 5½ by 8 inches. *Price 60 cents.*

This is a very entertaining little book written for children, describing life in Argentina.

The story runs easily and the author has shown much skill in handling facts in order to impress them strongly on the childish mind. This is cleverly shown in the description of the "*La Prensa*" building in Buenos Aires.

The book should be found on all school shelves and in children's libraries.

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"**Mythologies of Ancient Mexico and Peru.**" By LEWIS SPENCE. Chicago, The Open Court Publishing Co. *Price*

The little book of only 79 pages is one of the "Religions: Ancient and Modern Series," issued by that company. It presents in a very readable form a sketch of the supposed religious beliefs of the Aztecs and the Incas, and of the rites and ceremonies of these peoples as the early Spanish conquerors interpreted or knew them. Much o the culture phenomena of these aboriginal occupants of America is still mythical, but serious study has been given them. In fact, the essayist's plea is that both nations deserve a fuller examination into their profoundly interesting faiths.

"**A Brief Grammar of the Portuguese Language.**" By JOHN C. BRANNER. New York, HENRY HOLT & Co., 1910. *Price $1.25.*

This is one of the few grammars for the use of English students of Portuguese published, and in many respects the best. It is the work of a scholar, and of a man who has had abundant practical experience in learning and speaking the language. Such a book should be in the hands of every one who intends to visit Brazil or Portugal. The presswork is excellent.

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"**The Story of Sugar.**" By GEORGE THOMAS SURFACE. New York and London, D. APPLETON & Co., 1910. *Price $1.*

For the reader wishing to get a thoroughly good knowledge of sugar, its history, spread over the world, gradual popularity and present day culture and use, these 225 pages are decidedly interesting. Special attention is given to the production of cane sugar in Latin America. Many definitions are given and careful distinctions are made between the various sugars, and between sugar, sorghum, and molasses. All stages from the crude juice to the most refined article are presented, although no attempt is made to be technical or exactly scientific. The author's conclusion is that the future of sugar, considering that the candy consumption in the United States alone is $500,000,000 annually, is encouraging.

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The Columbus Memorial Library has recently received the following pamphlets:

"**British Guiana as a Holiday Resort.**" By EDITH A. BROWNE. Demerara, British Guiana, SPROSTONS (Limited), no date. Illus. Fold. Map. Size 5 by 6 inches.

"**Ecuador and Peru. A Résumé of the Boundary Controversy.**" (For the press of United States.) Washington, District of Columbia, Press of BYRON S. ADAMS, 1910. Cover-title. 14 p. Size 6 by 9 inches.

"**Industrial Progress of Mexico.**" By JOHN BIRKINBINE. Reprint from volume 26, No. 3, July, 1909, of the "Proceedings of the Engineers' Club of Philadelphia." Caption-title. 20 p. Illus. Size 6 by 9 inches.

"**A Trail Through the Mountains of Oaxaca, Mexico.**" By HENRY E. BIRKINBINE. Reprint from volume 36, No. 3, July, 1909, of the "Proceedings of the Engineers' Club of Philadelphia." 21–28 pp. Illus. Caption-title. Size 6 by 9 inches. (With, "Industrial Progress of Mexico.")

"**Tezonapa Botanical Station, Organization and Object.**" By PEHR OLSSON-SEFFER, director. Mexico, Print of "The Mexican Mining Journal," no date. 45 p. Illus. Size 5½ by 9 inches.

"**Causes of Lack of Political Cohesion in South America.**" By Prof. HIRAM BINGHAM. Reprinted from the "American Political Science Review," November, 1910, Baltimore, Maryland. 508–515 pp. Size 7 by 10 inches.

"**Certain Characteristics of the South Americans of To-Day.**" By Prof. HIRAM BINGHAM. Reprinted from the "Popular Science Monthly," December, 1910. 582–589 pp. Size 7 by 10 inches.

"**Exploration of Certain Iron-Ore and Coal Deposits in the State of Oaxaca, Mexico.**" By J. L. W. BIRKINBINE. A paper read before the American Institute of Mining Engineers at the Pittsburg meeting, March, 1910. Author's edition. 1910. 23 p. Diagrams. Size 6 by 9 inches.

"**The Romance of the Name America.**" By HEINRICH CHARLES. New York, The St. Dié Press (1909c). 19 p. Size 6 by 9 inches.

"**L'évolution des cinq Républiques de l'Amérique Centrale (Costa Rica, Guatemala, Honduras, Nicaragua, et Salvador).**" Par DÉSIRÉ PECTOR . . . Paris, Comité "France-Amérique," 17 Rue Cassette. 1910. 11 p. Size 7½ by 10½ inches.

"**The Iron and Steel Industry of Mexico.**" An article apropos of the centennial of the Mexican Republic. By JOHN BIRKINBINE. Reprinted from the "Iron Age," September 8, 1910. 556–568 pp. Cover-title. Size 8½ by 12½ inches.

"**Cotton Mills of Mexico.**" By SPENCER JANNEY STEINMETZ. A paper read before the National Association of Cotton Manufacturers . . . September 16, 1910. Half title. 11 p. Size 7 by 11 inches.

"**Report of the Gold, Diamond, and Forest Industries of British Guiana.**" 1909–10. Issued by the Institute of Mines and Forests of British Guiana. (Georgetown.) Printed by The Argosy Company. 21 (48) p. Illus. Size 7 by 9½ inches.

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The Pan American Union has recently received a sample copy of the interesting review entitled "France-Amérique," published by the Franco-American Committee of Paris, whose purpose is in many respects similar to that of the Pan American Union and its organ, the MONTHLY BULLETIN. The committee, which is composed of eminent Frenchmen of international reputation, was organized in Paris at the end of the year 1909, and the work is maintained by private subscriptions. Mr. GABRIEL HANOTAUX, of the French Academy, and former Minister of Foreign Affairs of France, is president; Gen. BRUGÈRE, ANATOLE LEROY-BEAULIEU, of the Institute, Director of the School of Political Sciences, Vicount ROBER DE CAUX DE SAINT-AYMOUR, vice presidents; Vicount DE BRETEUIL, treasurer; and GABRIEL LOUIS JARAY, auditor of the state counsel, general secretary.

Its members include men distinguished in every walk of life. Among the life members are ROBERT BACON, United States ambassador to France, and JAMES H. HYDE. The purpose of the committee is to work for the development of relations of all kinds between France and the two Americas; to publish a review containing the most complete information on the economic, scientific, intellectual, literary, and artistic life of America and France. The committee also aims to eventually establish in Paris an American Home where travelers from across the sea will be sure of finding a hearty welcome and where they will feel at home.

The November issue of the REVIEW contained the following interesting articles: "Protection of dramatic authors," by PAUL HERVIEU, of the French Academy; "Protection of literary works," by RENÉ DOUMIC, of the French Academy; "Mr. ROOSEVELT and the future," by PAUL ADAM; "France of to-day," by EMILE FAGUET, of the French Academy; "Exchange in Brazil," by MAURICE LEVY; "Jacques de Liniers and Napoleon," by MAURICE ESCOFFIER, professor in the School of Political Sciences; "Railroads and Navigable Waterways in the United States," by AUGUSTE PAWLOWSKI, editor in chief of the "Journal des Transports;" "The United States and Liberia," by L. POUPARD, on mission to Liberia; and numerous other articles relating to the different South American countries by equally distinguished writers.

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# LATIN AMERICA IN THE MAGAZINES

"**Commercial Mexico**" is the leading article in "*Commercial America for January,*" and there is no better answer to the critics of this Republic and its head than the figures given in this paper.

Taking the period when President DIAZ first came to power in 1875, the exports reached the value of $26,000,000, while in 1910 they almost touched $130,000,000, about five times as great, while the proportionate increase in imports has been even greater.

For details we quote:

The value of the exports to the United States was $98,500,000, or a little over 76 per cent; that to Great Britain was $14,200,000, or nearly 11 per cent. The value of the exports to France was $6,100,000; to Germany, $4,200,000; to Belgium, $3,800,000; to Spain, $960,000; to Cuba, $852,000; and to Canada, $518,000. The United States has for a long time bought most of the Mexican products exported to foreign countries. This is due partly to the fact that the United States is the nearest large manufacturing country. Taking the percentage of the exports of Mexico sold to the United States during the last twelve years, as shown in the following table, it will be seen that the percentage for 1910 is the largest:

| | | | |
|---|---|---|---|
| 1899 | 69.75 | 1905 | 73.34 |
| 1900 | 73.37 | 1906 | 68.60 |
| 1901 | 74.19 | 1907 | 70.88 |
| 1902 | 75.85 | 1908 | 70.08 |
| 1903 | 67.30 | 1909 | 74.84 |
| 1904 | 67.25 | 1910 | 76.05 |

The value of the imports into Mexico in 1910 was $97,039,000. This value has only been exceeded in the years 1906, 1907, and 1908. In 1906 the value was $109,562,000; in 1907 it was $115,050,000; and in 1908 it was $110,324,000. The value of the imports fell off to $77,939,000 in 1909, but increased nearly $20,000,000 in 1910. The value of the imports from the United States in 1910 was $56,439,000, or about 58 per cent of the total value of all imports. A comparison of the imports into Mexico by countries in 1900 and 1910 shows that the percentage of increase in the imports from the United States was greater than that from any other country. In 1900 the value of the imports from the United States was $31,000,000, and in 1910, $56,000,000, an increase of 80 per cent. During the same period Germany increased its exports 50 per cent; France, 30 per cent; Great Britain, 5½ per cent, and Spain decreased 10 per cent.

The great mineral wealth of Mexico of course makes up the bulk of the exports, but a study of the figures gives some surprising facts in regard to the auriferous wealth of this Republic.

The value of the output of the gold mines of Mexico during 1909 was $22,500,000, of which the value of the gold exported was $19,600,000. This value exceeded that of any previous year and is more than double what it was in 1904. This increase is partly due to the discovery of new mines, but mainly to the further application of the cyanide process to the treatment of gold-silver ores and the improvements in that process. In 1910 the value of gold exported was $21,318,000, or over $2,000,000 more than in 1909. Mexico ranks fifth among the gold-producing countries of the world.

The production of silver in 1909 amounted to 2,292,000 kilograms, valued at $38,550,000, of which $36,920,000 worth was exported. This was the largest quantity ever produced in one year, but owing to the low price of silver was less in value than in 1908, when 2,151,000 kilograms, valued at $42,700,000, were produced. The exports of silver in 1910 were valued at $38,174,000, an increase in value of $1,254,000 over that of 1909. The output of all the silver mines in the world in 1909 was 6,768,829 kilograms, of which the Mexican mines produced 2,259,830 kilograms, and the United States 1,674,704. Mexico, therefore, produced one-third of all the silver in 1909 and is the leading silver-producing country in the world.

The value of the Mexican copper production in 1909 was $13,085,000. This is larger than any preceding year. More than one-half of the copper exported from Mexico is sent to the United States and one-fourth to France. Mexico is second only to the United States in the production of copper. Lead in the form of galena is a common constituent of the silver-bearing veins of Mexico and is often highly argentiferous and may be regarded as an ore of silver. The value of the exports of lead in 1910 was $3,404,000, which is a greater value than in any other year. Mexico ranks third in the production of lead, being exceeded in the quantity produced by the United States and Spain. Although Mexico ranks fifth in the production of

quicksilver, it does not produce enough to supply its own needs. Mexico ranks second in the production of antimony and the exports of this metal in 1910 were valued at $1,093,000. Zinc to the value of $575,000 was also exported.

Latterly there has been a considerable advance in the amount of exportation of food products, which augurs well for the industrial development. Coffee is the most important food product exported, and cotton is being largely cultivated but not in such quantities to supply home consumption. The two distinctive products are chicle, which is the basis of chewing gum, which reached an export value of $1,700,000 in 1910 or about one-half million more than the previous year, and fibers.

As indicating what a good customer this Republic is we quote:

According to the Mexican classification, the imports in 1910 and the increases over 1909 were as follows:

| | 1910 | Increase over 1909. |
|---|---|---|
| Animal materials | $7,500,000 | $1,221,000 |
| Vegetable materials | 21,350,000 | 6,672,000 |
| Mineral materials | 27,930,000 | 5,636,000 |
| Textiles, and manufactures of | 10,106,000 | 2,155,000 |
| Chemicals and pharmaceuticals | 5,619,000 | 791,000 |
| Spirits, etc | 3,276,000 | 493,000 |
| Paper, and manufactures of | 2,522,000 | 199,000 |
| Machinery and apparatus | 10,473,000 | 413,000 |
| Vehicles | 2,877,000 | 720,000 |
| Explosives | 1,451,000 | 185,000 |
| Other | 4,310,000 | 676,000 |

The geographical position of the United States gives it a tremendous advantage in trading with Mexico, and while our merchants are doing rather well down there, still the above table should inspire them to even greater efforts.

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"**The Panama Canal Versus American Shipping.**" By A. G. McLellan, in the January number of "*The North American Review*," endeavors to determine whether the American people are going to profit to a sufficient degree through the medium of the opening of the canal, and whether the cutting of this waterway will give American shipping the necessary stimulus which it stands so sadly in need of to-day.

In a discussion of the conditions that will confront American shipping interests, the author divides them into three classes: Foreign-going, coastal, and naval, and in order to arrive at some idea of the future effect on trade of the shortening of routes by the Panama Canal, he takes up the study of the Suez Canal as giving some basis of the effect of changed conditions.

A study of the Suez Canal and what its opening meant to the small shipowners of Europe ought to interest those holding office in America. What it did for European shipping the Panama Canal can do for American shipping if the problem is faced squarely and without loss of time.

The opening of the Suez Canal made it possible for small steamers ranging between 3,000 and 5,000 tons gross to engage in eastern trades which hitherto were closed to them because the long distances required to be traveled swallowed up the profits on freights. This reduction in mileage will be repeated when the Panama Canal is declared open to navigation. Small steamers of the tonnage mentioned will pioneer a trade which at present is quite beyond their earning capacities, but which will be well within the margin of dividends when entrance to the Pacific is gained by passing through the Panama Canal instead of by the routes now followed—via Cape Horn or Straits of Magellan.

Roughly speaking, the distance by water from Europe to the principal ports of California and Oregon is about 14,000 miles, and to the principal ports of Chile and Peru about 10,000 miles. Freights, at their present figure, make it impossible for small steamers of the tramp class to engage in trades which, owing to the long distances required to be traveled, offer no inducement to the owner of small steamers. But when the present 14,000-mile stretch is reduced to about 7,000 miles and the 10,000-mile stretch to 4,000 through gaining admittance into the Pacific via Panama instead of via Cape Horn, European shipowners see at a glance that this tremendous reduction in mileage represents the difference between profit and loss, and they will not hesitate to send their small low-powered vessels into the Pacific to seek their fortunes.

Allowing that European tonnage instead of increasing remains stationary, what then will happen? The congested state of shipping now engaged in all eastern trades will be greatly relieved by the temporary



ONE OF THE SEVEN CATARACTS FORMING THE GREAT FALLS OF GUAIRA IN THE ALTO PARANA RIVER, LOCATED IN BRAZIL NEAR THE PARAGUAY BORDER.

withdrawal of many vessels suited to the new trades which the Panama Canal will create. This cuts two ways. While the congestion out East is relieved by the withdrawal of tonnage, freights consequently must rise; and while this is taking place vessels which before only helped to spell confusion will then establish new trades which are bound to guarantee a profit. On the other hand, if at the time of the opening of the Panama Canal eastern freights should show a tendency to rise or even remain steady, then no vessels of any consequence will be withdrawn from eastern waters. Rather new and cheaply built small vessels of low power will crowd in and throttle any half-hearted efforts which American shipowners, if the past is any criterion, are sure to make in their attempts to gain a footing in the Pacific. The time is now, and not after the opening of the canal, when America should lay down the nucleus of a merchant marine sufficient in size to cope successfully with foreign merchant marines.

The author then proceeds to discuss the competition of railroad and steamship routes brought into being by the completion of the canal, believing that the railroads will be able to control freight rates then as they do now, and follows with a statement of the tremendous importance the cutting of the canal means to the United States by increasing its naval proficiency.

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"**The Guayra Falls,**" in "*The Illustrated Review,*" of Buenos Aires for November 15, describes the great waterways of South America taking their sources in the deep interior of this vast continent, and in their tortuous way to the sea developing many miles of rapids where the waters rush hurling and swirling to some gigantic cataract. Travelers tell us that the most magnificent of these are the Iguaza Falls, the Paulo Affonso Falls, and the Guayra Falls. These latter, away in the headwaters of the Parana River, because of their remote situation, have been seen by few Europeans. A score, perhaps, of white men have viewed the splendor of its rushing torrents, said to be the grandest sight of its kind in the world. The following description is therefore not without interest.

The Guayra Falls may be best described as a series of gigantic cataracts. The River Parana immediately south of the large island of Guayra, which it forms between the latitudes of 23 and 24, attains a width of nearly 3 miles. Shortly afterwards, however, the channel of the river is suddenly obstructed by a barrier of rocky islands, which stretch diagonally from bank to bank. The river forces itself down between these, forming seven large cataracts and several smaller ones, and enters a rocky gorge not more than 100 yards in width, into which the whole volume of water plunges with indescribable fury. The region of the falls covers about 3 miles of the river's course, and we calculated the difference in level between the highest and lowest points to be nearly 400 feet, the incline, therefore, being roughly 130 feet per mile. The incline is very rapid at the start and becomes nearly level at the bottom. We judged the velocity of the current to be not less than 20 miles per hour. The falls are seen at their best when the river is low (July, August, and September), as the passage of the water is more broken and obstructed by obstacles which at other times would be completely submerged. At the season when the river is in flood (April and May) fully double the quantity of water passes down the falls, compared with the time of our visit, as we were able to judge from the marks on the rocks, showing where the water reaches at such times. As regards the average volume of water in the year, there can be no doubt that the Guayra Falls are the greatest in the world, far surpassing Niagara.

At the point where we came out, the whole panorama of the falls lay before us. The rocks on which we stood were situated about 100 feet above the surface of the water. On our left hand was the narrow gorge which receives the waters from the cataracts, and in front of us and on our right hand were the cataracts themselves. The terrific fury of the rushing waters, the thundering roar as the river hurls itself down the cataracts, the clouds of spray thrown up into the air, all contributed to cause at first a sensation of giddiness and vertigo. As, however, eyes and ears became better accustomed to the sight and sound, we were able to contemplate at our leisure this extraordinary and stupendous freak of nature. Silent and awe-struck we stood and gazed at this evidence of Nature's power, a sight without parallel in the world.

The two topmost cataracts, of which an uninterrupted view is obtained looking upstream, present a sight of unrivaled grandeur. The quantity of water which passes down them is enormous and much greater than that of all the other cataracts together. The remaining five cataracts are situated at right angles to the first two, the island which causes their formation being in a line opposite and parallel to the Paraguayan bank, where we came out. Of these five cataracts, the second downstream presents a clear fall of over 100 feet (the highest drop in the Guayra Falls), the spray from this fall rising into the air half as high again. Unfortunately a clear view is not obtainable, as it is situated some way back from the cliff-like banks o the islands and its waters pass down a short curved channel before joining the main stream. The beauty of this single fall alone is sufficient reward to the traveler for his journey. Beyond the islands and through the dazzling mist caused by the spray, we could see the broad expanse of water stretching far away to the Brazilian shore, some 3 miles distant.

The Guayra Falls, a little-known wonder of the world, are really stupendous, 2 miles along the crest, 310 feet high, and discharging 13,000,000 cubic feet by volume per minute.

Undoubtedly as this great southern continent progresses in the field of transportation these wonders of Nature will become the mecca of tourists.

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"**A Wire Rope of Unusual Construction,**" in the "*Engineering News*" for December 29, gives a technical description of a rope used in the cable incline of the Mayari Railroad of Cuba. The rope is made as follows:

A wire rope of exceptional type has been recently made for use upon a double-track cable incline forming a part of the Mayari Railroad. This railroad was built by the Spanish-American Iron Company for transporting iron ore from the top of Mayari Mountain to Felton terminal, on the north coast of Cuba, a total distance of some 17 miles. The main haulage rope to be used upon the incline is 3 inches in diameter, 7,810 feet long, and weighs 123,360 pounds. It is composed of an independent wire rope center 1⅛ inches in diameter, made of six strands of 19 wires, each twisted around a hemp core. Six other strands of 19 wires each are twisted around this center.

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"**The Buenos Ayres Railway Exhibition,**" a column in "*The Railway Gazette*" for December 16, reviews the main features of the different exhibits of land transport recently shown in Buenos Aires. In this connection, the possibilities of foreign countries finding a market for their material is shown in the following paragraphs:

The expansion which is taking place in the railways of South America generally and in Argentina, Brazil, and Chile in particular, details of which appear from time to time in this paper, make it look as though there will be during the next few years plenty of opportunities for manufacturers of railway material to recoup the expenditure they have made in the exhibition. In Buenos Aires itself there are the important electrification schemes connected with the Buenos Ayres Western Railway, and the Central Argentine and the Anglo-Argentine Tramways, which also involve considerable civil engineering works. New termini are about to be built and other works carried out. In addition to this there is a regular expansion of railway lines continuing in all parts of the country. In the other large towns of the Republic, especially in Rosario and Mendoza, for instance, important railway works are about to be carried out, while the steady growth of traffic on the Transandine will necessitate considerable expenditure in the latter neighborhood. The outlook for manufacturers is good.

In Brazil again the rate of expansion continues unabated, and here again electrification on a considerable scale in the neighborhood of Rio is about to take place. In Chile the progress of the longitudinal railway and important dock and harbor works also will provide openings for considerable business.

In addition to this, as the letters from our special correspondent during the past few months have shown, in Bolivia, Ecuador, and Colombia, various new lines are about to be undertaken. On the whole, therefore, it looks as though South America will continue to be one of our principal markets for railway material, and although Great Britain no longer enjoys that monopoly in the business which it formerly possessed, owing to the appearance in the field of painstaking and energetic rivals, the extent of the work and the rate of expansion are so great as to provide a share for all.

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"**Social Conditions and the Labor Question in Cuba,**" by FIELDING PROVOST, the second paper on this subject, is in the January number of the "*Pan American Magazine.*"

"**A Short Story of Agriculture in Cuba,**" by LINCOLN S. CORNISH, is another paper of considerable interest to the prospective immigrant, appearing in this magazine.

"**Cuba: Her Wealth and Poverty,**" by W. W. RASOR, in this same magazine, commences with the statement that "The per capita commerce of the Cuban people is $100; this is only excelled by the inhabitants of Argentina, whose trade amounts to $108 per capita," a most remarkable statement, but not to be wondered at when one makes a dissection of Cuban trade. Conditions are so complex in this wonderful island that in spite of these remarkable trade figures, the masses of people can not be considered altogether prosperous.

"**Argentine Harvests and Finance,**" a letter from the Buenos Aires correspondent of *The Economist*, dated November 25, discusses agricultural conditions in the Argentine Republic and their effect on finances of the country. In spite of the discouraging conditions which the Argentine farmer has had to contend with, the following shows the prosperous condition of the country:

The returns of the bank balances on October 31 show, in the aggregate, an increase of about $7,000,000 m/n in deposits, an increase of more than $21,000,000 m/n in discounts and advances, and a diminution of more than $8,000,000 m/n in cash reserves. The aggregate amounts of cash held by the banks of the capital at the end of October were about $58,400,000 gold and $336,500,000 in paper money. Of these sums the Bank of the Nation held $35,200,000 gold and $118,800,000 m/n. The London and River Plate Bank held $6,900,000 gold and $53,800,000 paper money. The amount of gold in the Caja de Conversion on the same day was $185,520,000. It is now nearly a million less, but in a few days, according to a telegram, £500,000 will arrive from London. The Spanish Bank is doubling its capital, and forming a large reserve besides, by issuing new shares for $50,000,000 m/n at a premium of 60 per cent, the holders of shares to have the preference. The subscription will be closed on December 8. The proceeds of the premium will be carried to the reserve fund. The legislature of the Province of Buenos Aires has passed the bill which authorizes a loan of $40,000,000 m/n ($17,600,000 gold), most of which is needed for the completion of the drainage works in the southeast of the province. It has been announced that the Pacific Railway Company will on December 1 open its branch line of 260 kilometers from Esperanza to Guadales. The cattle traffic on the Transandine Railway may be expected to be largely increased next year, as three freezing establishments are projected for installation on the Chilean coast.



HARVESTING IN THE ARGENTINE REPUBLIC.

"**Japan and South America,**" appearing in the publication, "*South America,*" for December, shows that there is a world wide awakening to the commercial opportunities of Latin America and we call our readers' attention to the activities of the great nation of the East, in the matter of turning the tide of trade.

That the Japanese Government intends to make a commercial conquest of the west coast and even extend its efforts to the Atlantic side of the southern continent is clearly seen from the following:

A further instance of the pushing policy of the Japanese in this direction is afforded by the formation in Tokyo of a Latin-American association to forward Japanese commercial interests mainly in Peru, Chile, Argentina, and Brazil, by an army of specially appointed officials. Japan's present exports to these countries comprise bamboo ware, silk fabrics, sulphur, and porcelain and she imports niter, wheat, leather, and animal hair. The duties of these Japanese officials will be to see that these goods pass to and from Japan without the employment of Chinese, French, or German middlemen. Japan is also believed to desire a share in the development of the agricultural and mineral resources of South America, and the Government is vigorously supporting every effort made to introduce Japanese labor in the plantations and on important contract work. At present the number of Japanese employed in South America is said not to exceed 5,000, but in view of the activity of the various emigration companies in exploiting Japanese labor, the number is not likely to stand near that low figure for long.

"**Romance Surrounding Mexico's Lost Mines,**" in "*Mines and Methods,*" for November, tells the stories of the lost mineral wealth of the early prospectors of Mexico, and how these stories have served as an inspiration for the modern search for precious metals.

It is a curious fact that very little of the gold of Mexico that is supposed to lie hidden deep under the soil has been discovered until late years, and many mines that furnished this precious metal for the fashioning of the images found in Mexico at the time of the conquest have never been discovered, and yet that gold exists in still greater quantities is the belief of all who have studied the geology of Mexico.

The prospector's only chance of obtaining wealth of gold in the Sierra Madre is to uncover a mina tapada—lost mine—or to follow the arroyos showing "color" or race "float," until the contact is met; then, perhaps, after weeks or months of searching the vein may be found. Perhaps it will prove one in thousands of sufficient value to work; perhaps it is the remnant of a once great vein that has been stored away by nature, the values all disseminated over a large area in small quantities and forever lost to man. There is a 12,000-acre ranch in Sonora, every square yard of which will yield a "color" in the prospector's pan. The source of the gold was unsuccessfully sought for many generations, and when finally found in a hill 10 miles distant of the once great vein not more than an arroba was left. It assayed thousand of dollars to the ton and the old haciendado died in poverty, bemoaning the fact that he had not lived a few hundred years sooner when the gold clustered thick in the seams of the denuded ledge that could be traced for more than a mile on the surface. Some day, perhaps, modern methods may find a means of gathering the scattered gold of the old rancho, that lies uncultivated since the death of the old don, who heavily mortgaged his inheritance and wasted all the energies of his life in deploring the shabby trick played upon him by nature.

There is always a fascination about the records and traditions of lost mines and one of the most interesting of these is Taiopa:

But the lost mine about which tradition gathers thickest is Taiopa, supposed to be located in the Sahuaripa district, in Sonora. Little documentary evidence exists to prove Taiopa's reality, and that has evidently been manufactured by unscrupulous manipulators. A wealthy Mexican gentleman recently made a trip to Madrid and after minute search at great expense found absolutely no data to prove that such a mine was worked for the Crown of Spain, and no reliable data in the Mexican archives or elsewhere to prove that such a mine was ever known. But quite as trustworthy as most written documents are the traditions gathered from the Pima Indians. They stoutly maintain that Taiopa exists, and a few claim to know its locality. Small quantities of very rich ore are occasionally sold at the mountain mining camps and all attempts to follow the Indians to the spot where it is found or bribe them to reveal it have failed. Wanting but little in addition to the corn they grow they are imbued with a superstition that if they reveal the locality of the mine they will be instantly struck dead. To one unacquainted with the Indian character this may seem incredible, but any prospector or miner in Sierra will affirm its truth. Large sums of money have been offered the Pimas to tell where the mine Taiopa is. They scorn money and the only open sesame is mescal, by the liberal use of which the Indian may be made to disclose many things, but so far he has held inviolate his vow to reveal to no mortal man the famous Taiopa. But the fascinating secret in part has been revealed to a woman. All tales of lost mines have for their central figure a grateful Indian, and this story is in that particular, monotonously like the rest. The facts, so far as I have been able to discover, are the following:

About a year and a half ago an old Pima chief fell ill in one of the valley pueblos, and was cured by a Mexican woman so well known and so estimable that her statement is universally accepted. The old Indian returned to his tribe, and from time to time sent her rich bits of ore that assayed thousands of dollars to the ton. All her efforts to induce him to lead her to the mine were futile. He said that the Great Spirit would strike him dead if he did. Last summer the plucky señora went to the mountains and lived among the Indians for three months, doctoring the sick and giving presents of calico and gay ribbons to the women and small quantities of mescal to the men. She became convinced beyond doubt that the spot from which the ore came was Taiopa. The chief admitted that it was the mine Taiopa that was worked when he was a boy. After much persuasion and the gift of a goodly portion of the fiery product of the maguey he directed two women of the tribe to take her to within a few yards of the mine that she might discover it unaided and save the Indian from the penalty of sudden death for revealing it. Overjoyed at gaining so much, the Mexican woman had two burros packed with provisions and mounted on these the three women set out. They traveled mostly at night, passing through deep canyons and over lofty mountain passes. The fourth night, some hours after dark, the Indian women led her into a deep canyon and paused a short distance from a large rock. In the dim moonlight an old arrastra was seen and across the canyon was a large ore dump, from which opened a tunnel. The woman gathered bits of ore from the dump and arrastra, but was hurried away by the Indians, who said that they would be killed if they delayed beyond the time given them by the chief. They traveled until the moon went down, rested a few hours, and went on before daylight, completely baffling the Mexican woman as to the route they had brought her. They arrived at the pueblo at nightfall, and having taken four days to reach the mine and but one to return, the obvious conclusion was that she had been led about in a circle—a curious method of putting at rest the complex Indian conscience.

Despairing of gaining more, the Mexican woman returned to her home. In September she returned with her young son, a Mozo, and a few burros to search for the elusive Taiopa. In crossing Rio Aros the Mozo and two of the burros were drowned. Disappointed but not discouraged the plucky woman left her son to work at a mining camp and returned to the valley for fresh supplies, promising to return and prosecute the search. May her courage be rewarded by all the treasure tradition attributed to the famed Taiopa.

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"**The Smallest of the Century Plants**," in "*The Popular Science Monthly*" for January, is a paper wherein the author, Prof. WILLIAM TRELEASE, describes the characteristics of that plant, the Agave, which because of its usefulness to the natives



GROUP OF AGAVE WISLIZENI.

There are more than 150 recognizable species of the genus agave in the arid and semiarid portions of the southwestern part of the United States, the table-lands of Mexico, and the adjacent mountain slopes, some of which thrive at sea level and others up to elevations of 10,000 feet. In the flowering season the unique plant shown in the cut sends up a high stalk, the top of which is covered with a cluster of beautiful golden flowers that break the monotony of the plain.

might be called the "foster mother" of the Indians inhabiting the tropical lands of America. The numerous varieties of this plant have held the attention of botanists for years, and it is difficult for the lay mind to realize that the giant century plant which one is accustomed to see in botanical gardens, conservatories, and in tropical countries has a tiny cousin, an almost exact miniature of the big plant, growing no larger than an English walnut.

"**Problems of Transportation,**" by H. M. BINCKLEY, in "*The Cuba Magazine*" for December, gives the details of an investigation undertaken with the object of putting the Isle of Pines in direct communication with the United States. If the author's idea is carried out, the line of service established will be of distinct value to the whole western section of Cuba.

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"**Cocoa Production in Bolivia,**" a paragraph appearing in "*The Spice Mill*" for December, gives a few brief facts on the cultivation of this bean in that Republic:

The production of cocoa is still more limited than that of coffee and most of it is raised in the Department of Santa Cruz, although its cultivation is not attended to as it should be; the best cocoa is produced in the Province of Apolobamba in the Department of La Paz. This kind is very popular and is known by the name of "Misiones" or "Cavinas" cocoa, after the Franciscan Mission, now destroyed, where it is produced. In this region cocoa trees grow in great abundance and in very thick groups, some of which contain as many as 1,000 trees.

Most of the production of this article is consumed in the country. Coffee is exported in small quantities to Chile and the Argentine Republic.

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"**Realizing the Dream of Panama,**" by GEORGE F. AUTHIER, in the January number of the "*Review of Reviews,*" is a résumé of the work already done, and the problems that now confront the diggers of the canal. The article is stripped of all references and statistics, and contains just the sort of information that would interest the average American reader who can not fail to be proud of the great work being carried out by his countrymen under the most adverse conditions.

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"**The Cabinet Woods of the Future,**" by C. D. MELL, in "*American Forestry,*" for December, calls attention to fields that will be open to searchers for hard woods in the future. That Brazil is a country rich in the products of its forests is shown from the long list of very valuable woods described in this paper and native to the great southern Republic. The character of wood found is available for a wonderful variety of uses, varying from the making of violin bows to naval construction.

The author concludes by saying:

South American countries will probably supply the bulk of our cabinet woods in the very near future. Transportation facilities are being speedily developed there, and capital from the United States is pouring in, thus developing natural resources with amazing rapidity.

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"**Ferrocarril en Miniatura,**" "**Valor nominal del Agua,**" together with "**Pan-América,**" an article by the Director General of the Pan American Union, make up the December number of "*Las Dos Americas,*" which in addition to its interesting text contains numerous splendid illustrations.

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"**The Tin Mines of Bolivia**" are the subject of an article appearing in "*Mines and Methods,*" for December. The author gives his opinion that capitalists of North America are becoming largely interested in the mines of Bolivia. He says in conclusion:

Important American interests are credited with the desire and intention of controlling the tin mines and the price of tin—about 40 cents at the present writing—would warrant such an enterprise. It will not be long before that elevated portion of Bolivia will be exploited by Americans and Englishmen much more than it is at present, on account of the increasing facilities for transportation. It is now possible to go from New York to La Paz in fourteen days, and with the completion of the Arica railway, this time will be shortened by nearly two days.

"**Some Mexican Transportation Scenes,**" by WALTER W. BRADLEY, in the December number of "*The National Geographic Magazine,*" gives the details of the manner in which goods are carried from place to place in the land of the Aztec heritage. The influence of aboriginal methods of transportation is seen in the characteristic method of the modern burden bearer.

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"**The Isthmus of Tehuantepec, 'The Bridge of the World's Commerce,'**" by HELEN OLSSON-SEFFER, "**Hewers of Stone,**" by JEREMIAH ZIMMERMAN, "**Agricultural Possibilities in Tropical Mexico,**" by Dr. PEHR OLSSON-SEFFER, and "**An Interesting Visit to the Ancient Pyramids of San Juan,**" by A. C. GALLOWAY, are other articles describing some of the distinctive phases of development in our sister Republic, gives gives this number of "*The National Geographic Magazine*" a distinctly Mexican atmosphere.

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"**Universidad de San Marcos,**" by WILLIAM CURTIS FARABEE, in "*The Harvard Illustrated Magazine,*" for November, is a paper which tells the story of this, the oldest educational institution in existence in the new world.

"**The Romance of Orchid Hunting,**" by P. HARVEY MIDDLETON, in "*American Home and Gardens,*" for January, tells of the hardships endured by the orchid hunter in pursuit of this beautiful prize.

"**Luxurious Private Car for South America,**" in the January 7 issue of "*Scientific American,*" is a description of the palace car built especially for the President of Argentina.

"**Bank of Spain Planning to Enter the Latin American Field on an Important Scale,**" is the heading of a paragraph in "*The Bankers Magazine,*" for January, which states that this important Madrid banking institution is to open up branches throughout Latin America, where, because of the predominant Spanish influence, it hopes to be most successful.

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"**Deep Mining in the Guanajuato District, Mexico,**" by FRANK H. PROBERT, in "*The Engineering and Mining Journal,*" for December 31, gives a brief outline of the difficulties met with and how they are successfully overcome by the mining engineers in this section of Mexico.

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"**Mexican Rubber Plantation Notes,**" a letter from a special correspondent of "*The India Rubber World,*" published in the January number of that periodical, tells of the success achieved by different land companies which are undertaking the cultivation of *Hevea brasiliensis* in the Republic of Mexico.

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"**The Port of Manzanillo,**" by HARRY H. DUNN, in "*Cassier's Magazine,*" for January, is a description of the improvements being carried out in order to make this one of the most important shipping centers on the west coast. The article takes up a technical description of the port works and prophesies a wonderful future for this city.

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"**Una Civilización Muerta,**" by R. DE ZAYAS ENRÍQUEZ, in the January number of "*América,*" is a well-illustrated description of the ruins of Chichen-Itza and a theory of the distribution of the ancient races of Mexico.

"**Argentina as a Market for American Manufactures,**" a report on a speech by Mr. CHARLES HITCHCOCK SHERRILL, United States Minister to Argentina, is the principal article in the December number of "*Exporters' Review.*" The speech was delivered by Mr. SHERRILL before the New York Chamber of Commerce, and it has been widely quoted in the public press.

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"**The Hostotipaquillo District, Jalisco, Mexico,**" by AUSTIN C. BRADY, is a descriptive article in the January 7 issue of "*The Mining World.*" A short article on the "**Tabatacochi District, Sonora, Mexico,**" by A. COLL, appears in the December 24 number of the same publication.

"**Peace With Safety—The Fortifying of the Panama Canal,**" by LEWIS NIXON, in "*The Editorial Review,*" for January, is the essence of the author's speeches dealing with this subject.

"**Rubber and Coffee in the Orient and Mexico,**" by PEHR OLSSON-SEFFER, is continued in the August-September number of "*The American Review of Tropical Agriculture.*" "**Castilla Rubber Pests in Mexico,**" by D. L. CRAWFORD is another article in the same magazine.

"**Commercial Mexico,**" by JOHN J. MCFARLANE, an article dealing with the resources and foreign trade of that country, appears in the January issue of "*Commercial America.*"

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"**Mr. Bryce on South America,**" is the special article of the South American Supplement of "*The Times*" for December 27. This distinguished statesman and diplomat has nothing but the highest praise for the countries through which he passed in his recent South American journey. He was greatly impressed by the panoramic beauty and the agricultural possibilities of the Latin American Republics where he was entertained.

Other articles are "**Science versus the Mosquito,**" "**Panama Canal, Life on the Isthmus,**" "**Life on Estancia,**" "**West Coast: Its Sanitary Condition,**" "**Japanese in Peru,**" "**Historical Sketches: III, Spanish America,**" "**Mosquitoes in the New World,**" and "**Falls of Yguazu.**"

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The excellence of the material appearing in this Supplement has frequently been commented upon in these columns, and in the interest of Latin American development we are glad to note that "*The Times*" have decided to take subscriptions for the South American Supplement alone at the very low price of 1s. 6d. per annum, post free.

Because of the variety and interest of the different articles appearing continually in this periodical, we unhesitatingly recommend it to all those who are interested in the progress of South America. Communications can be sent to Mr. G. A. HEATH, "*The Times,*" Printing House Square, London, E. C.

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"**Colombia and Her Creditors,**" "**The Nitrate Trade and Its Prospects,**" and "**Improved Financial Position in Mexico,**" are the three leading editorials in "*The South American Journal,*" for January 7. This is also the Annual Review number of this periodical which, in the letters of its correspondents, gives reliable information on conditions in all the South American countries. With this number there is issued a supplement which reviews trade conditions in the principal Latin American countries

for the year 1910. This supplement gives the total trade of 18 of the Latin American Republics, excluding Haiti and the Dominican Republic, as aggregating a value of £432,000,000, or over $2,100,000,000, of which the lion's share goes to Great Britain, to the amount of £95,000,000, or more than $462,000,000.

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"**Guatemala: Travels and Experiences,**" by W. S. Ascoli, F. R. G. S., in "*The Journal of the Manchester Geographical Society,*" Volume XXIV, Part III, 1908, is one of the best descriptions of the physical characteristics of this Republic that it has been our good fortune to read. The author creates a mental picture that can not fail to interest even a casual reader in the possibilities of Guatemala.



"**The Panama Exposition for New Orleans,**" by Edwin Boone Craighead, LL. D., in "*The Independent,*" for January 12, is a presentation by the distinguished head of Tulane University of the claims of New Orleans for the coming exposition.

"**First Letter from South American Expedition,**" appearing in "*The Saturday Blade,*" Chicago, of January 14, is a description by Mr. W. D. Boyce of his adventures on the first section of the journey which has for its object the circling of South America.

"**Castilloa Rubber in Cuba,**" "**Increased Areas under Rice in Brazil,**" and "**Indigenous Rubber in Brazil,**" are articles appearing in "*Tropical Life*" for December, 1910.

"**America's Awakening to Possibilities of Latin Countries,**" by E. Battle y Alvarez, is one of the principal articles in "*Mill Supplies*" for January.

# SUBJECT MATTER OF CONSULAR REPORTS

## REPORTS RECEIVED TO JANUARY 15, 1911.

| Title. | Date. | Author. |
|---|---|---|
| ARGENTINA. | 1910. | |
| Argentine industrial census | Aug. 31 | R. M. Bartleman, Consul General, Buenos Aires. |
| Linseed crop of Argentina | Oct. 27 | Do. |
| Census of 1909 of city of La Plata | Oct. 28 | Do. |
| Educational journey of Argentines to the United States | Nov. 2 | Do. |
| Labor conditions in Argentina | Nov. 3 | Do. |
| Argentine mines (digest of legislation regarding same) | Nov. 5 | Do. |
| BRAZIL. | | |
| Rubber goods in Brazil | Nov. 12 | J. J. Slechta, Vice Consu General, Rio de Janeiro. |
| Printing supplies in Brazil | ...do..... | Do. |
| Trade of Brazil, nine months of year 1910 | Nov. 16 | Do. |
| American wireless in Brazil | Nov. 17 | Do. |
| Brazilian railway notes | Nov. 18 | Do. |
| Cost of handling vessels and cargoes in the Port of Para | Nov. 21 | G. H. Pickerell, Consul, Para. |
| French cars for Bahia Railroad | Nov. 22 | S. P. Warner, Consul, Bahia. |
| Suggestions for increasing American imports at Bahia | Nov. 23 | Do. |
| CHILE. | | |
| Pawnbroking in Chile | Oct. 28 | Alfred A. Winslow, Consul, Valparaiso. |
| Order for new steamers | Oct. 31 | Do. |
| Improvement of Valdivia River | ...do..... | Do. |
| British and American Hospital | Nov. 1 | Do. |
| Wireless stations | ...do..... | Do. |
| Analysis of Chilean coal | Nov. 5 | Do. |
| Drought in Chile | Nov. 15 | Do. |
| Prices and production of nitrate of soda | Nov. 17 | Rea Hanna, Consul, Iquique. |
| COLOMBIA. | | |
| Pawnbroking in Bogota | Oct. 20 | Chas. H. Small, Vice and Deputy Consul General, Bogota. |
| Translation of Colombian Law, No. 71, of 1910 | Nov. 8 | Do. |
| Translation of Colombian Law, No. 52, of 1910 | ...do..... | Do. |
| DOMINICAN REPUBLIC. | | |
| Post-office money orders in the Dominican Republic | Nov. 28 | P. E. Holland, Consul, Puerto Plata. |
| Banana export from Puerto Plata | ...do..... | Do. |
| Births, marriages, and deaths in the Commune of Santiago de los Caballeros, Dominican Republic. | ...do..... | Do. |
| Suspension of the steamship Julia | Nov. 29 | Do. |
| ECUADOR. | | |
| Pawnbroking in Ecuador | Oct. 28 | H. R. Dietrich, Consul General, Guayaquil. |
| Market for phosphate fertilizers | Nov. 14 | Do. |
| GUATEMALA. | | |
| Railroad construction in Guatemala | Nov. 2 | Geo. A. Bucklin, Jr., Consul General, Guatemala City. |
| HONDURAS. | | |
| Sale of musical instruments and supplies | Nov. 30 | A. T. Haeberle, Consul, Tegucigalpa. |
| MEXICO. | | |
| Market for cream separators | Nov. 10 | Arnold Shanklin, Consul General, Mexico City. |
| Market for vitreous floor tile | Nov. 11 | A. J. Lespinasse, Consul, Frontera. |
| Market for pumps, windmills, etc | Nov. 12 | Do. |
| Market for salt codfish canned lobsters, shrimps, etc | Nov. 14 | Do. |
| Market for jewelry | ...do..... | Do. |
| Automobile stage lines established between Nogales and Altar, Sonora, Mexico. | Nov. 16 | A. V. Dye, Consul, Nogales. |
| White-oak timber, cooperage factories, etc | Nov. 21 | J. H. Johnson, Consul, Matamoros. |
| Railway concession in Mexico | Nov. 25 | A. V. Dye, Consul, Nogales. |
| Law and concession covering catching of sea turtles | Nov. 26 | Clarence A. Miller, Consul, Tampico. |
| Large landed estates in San Luis Potosi | Nov. 28 | W. L. Bonney, Consul, San Luis Potosi. |



BUILDING OF THE ARGENTINE REPUBLIC AT THE TURIN EXPOSITION.



SPECIAL BUILDING OF THE LATIN AMERICAN REPUBLICS AT THE TURIN EXPOSITION, TURIN, ITALY APRIL 30 TO OCTOBER 31, 1911.

## REPORTS RECEIVED TO JANUARY 15, 1911—Continued.

| Title. | Date. | Author. |
|---|---|---|
| MEXICO—continued. | | |
| Sale of optical goods abroad | Nov. 29 | L. W. Haskell, Consul, Salina Cruz. |
| Complete census returns for the State of Sonora | ...do | Louis Hostetter, Consul, Hermosillo. |
| Oil-producing plants | Dec. 1 | Clarence A. Miller, Consul, Tampico. |
| Lumber in Mexico | Dec. 2 | Wm. E. Alger, Consul, Mazatlan. |
| Foreign trade opportunities | ...do | A. B. Garrett, Consul, Nuevo Laredo. |
| Mineral resources of the northern district of Lower California | ...do | G. B. Schmucker, Consul, Ensenada. |
| The sale of optical goods abroad | ...do | C. M. Freeman, Consul, Durango. |
| Tampico Notes: Paving of streets of Tampico—Tampico may become a manufacturing center—River navigation. | Dec. 3 | Clarence A. Miller, Consul, Tampico. |
| NICARAGUA. | | |
| Prices of beer | Nov. 30 | Samuel T. Lee, Vice Consul, Bluefields. |
| PARAGUAY. | | |
| Quebracho lands, their values, prices, etc | Oct. 19 | C. Ferris, jr., Consul, Asuncion. |
| Law granting exemptions and privileges to refrigerating plants established in the country. | Oct. 31 | Do. |
| Paraguayan notes: Concession for the "Transparaguayan Route," to connect Asuncion with the Atlantic coast, has been transferred to Brazilian railway interests—Plans for the construction of the line from Asuncion to eastern boundary of Paraguay have been filed with the Minister of Interior—Practically no Government land in extensive tracts is available in Paraguay—Freight rates from Buenos Aires to Asuncion—Report in a Peruvian newspaper that 2,000 Japanese agricultural laborers are to be brought from Japan to Paraguay, to engage in the cultivation of rice—Efforts being made to encourage the production of cotton in Paraguay, due to reports of increasing absorption of the American cotton crop by manufacturers at home—Little immigration into Paraguay, but growing confidence together with the opening up of a fine section of the country by railway communication, adjacent to Argentina, affords an encouraging outlook—Asuncion needs a good school for children of European residents, especially Germans and English—In connection with such a school, native Paraguayans would welcome opportunities to study English—Thirty to 40 days required for a letter to reach Asuncion from North America—Freight takes at least a month, often much longer—All freight shipped to Asuncion must be marked "Transito para Asuncion," in order to avoid customs duties in Montevideo and Buenos Aires. | Nov. 1 | Do. |
| SALVADOR. | | |
| American machinery in Salvador | Nov. 19 | T. E. Dabney, Consul General, San Salvador. |
| URUGUAY. | | |
| Opening of the first section of the railway from Nico Perez to Treinta y Tres. | Oct. 13 | F. L. Goding, Consul, Montevideo. |
| Customs jurisdiction of the Yaguaron River and Lake Merim | Oct. 30 | Do. |
| Call for bids for an electric-light plant at Las Piedras, Uruguay | Nov. 5 | Do. |
| VENEZUELA. | | |
| Prices of beer | Oct. 25 | H. R. Wright, Consul, Puerto Cabello. |
| Importation of explosives and production of copper | Nov. 10 | Do. |
| Prices of beer in Venezuela | Nov. 16 | I. A. Manning, Consul, La Guaira. |
| Sale of beverages in Venezuela | Nov. 20 | R. J. Totten, Consul, Maracaibo. |
| Exportation of frozen beef to England | Nov. 23 | H. R. Wright, Consul, Puerto Cabello. |
| Tariff on dextrine | ...do | I. A. Manning, Consul, La Guaira. |
| Prices of beer | Nov. 25 | R. J. Totten, Consul, Maracaibo. |
| Optical goods in Venezuela | Nov. 26 | I. A. Manning, Consul, La Guaira. |
| Venezuelan Guayana | ...do | Do. |
| Concession for manufacture of extract of tannin | ...do | Do. |

# RECEPTION OF THE SPECIAL AMBASSADOR FROM MEXICO

On January 24, 1911, Señor Don Joaquín D. Casasús, Ambassador Extraordinary and Plenipotentiary of the United States of Mexico on Special Mission, was formally received by the President of the United States.

Upon delivering the credentials accrediting him as Special Ambassador of this mission of friendship, Señor Casasús spoke as follows:

Mr. President: I have the honor to place in your hands the credentials whereby I am accredited before you as Special Ambassador, for the purpose of conveying to you the gratitude of the people and of the Government of Mexico in return for the warm marks of sympathy with which you were pleased to distinguish them on the occasion of the festivities of the first Centenary of Mexican Independence.

It is a source of congratulation for me to have been appointed to fulfill this special mission, because my Government, well aware of the sentiments by which I am animated, could not have intrusted me with more agreeable a task, bearing above all in mind that I have come to interpret the desire of the Mexican Nation that you be assured how highly it has appreciated the marked friendship which your people and your Government have evidenced it.

It seemed impossible that the friendly relations which of old have existed between the Mexican Government and that of the United States of America and which have contributed to render our communications easier, and to further the expansion of our commerce and to strengthen the powerful bonds by which the two countries are united, could become yet more cordial than what they were before; but there is no doubt that if this was but the reciprocal longing of both Governments, to-day that still greater cordiality has been achieved and to this has contributed very powerfully the desire of your people and the action of your Government, because if you, Mr. President, sent Mexico on the occasion of the festivities of the first Centenary of our Independence a Special Embassy commissioned to represent you, the people of the United States were also represented through the Delegations which were appointed by the Senate and by the House of Representatives.

This has been so unmistakable a proof of esteem and confraternity, that the people and the Government of Mexico shall never forget the participation which the people and the Government of the United States took in their rejoicings on the occasion of the festivities of the first Centenary of our Independence, and whereby they wished to signify that the love of liberty and the love of independence are and should be the indestructible foundation and the most efficient guarantee of the autonomy of the nations of America.

While discharging the commission intrusted to me by my people and by my Government, allow me, Mr. President, to express to you my most fervent wishes for your personal happiness and for the ever-increasing prosperity of the American people.

President TAFT responded with the following remarks:

Mr. AMBASSADOR: Having the most agreeable recollections of your former residence at this capital as the regularly accredited Ambassador Extraordinary and Plenipotentiary of the Government of Mexico, it gives me double pleasure now to receive from your hands the letter whereby you are accredited as Special Ambassador for the friendly purpose which you have mentioned.

With the desire to evidence to the fullest extent, on the occasion of the Centenary of Mexican Independence, the friendly regard and esteem entertained by the United States for her neighboring sister Republic, the Congress of the United States authorized the sending of a Joint Commission representing the Executive and Legislative branches of this Government to convey to the Government and people of Mexico the congratulations of the Government and people of the United States in the great progress which had been the destiny of Mexico during the years of its independence, and their best wishes for the Republic's continually increasing future prosperity; and it gave me great pleasure to send, in addition to this Joint Commission, a Special Embassy to make known to President DIAZ my own sentiments of respect and my best wishes for the continued prosperity of the Mexican people under his enlightened administration.

That these evidences of the good will of the United States have received on the part of the Government of Mexico such favor as to merit their acknowledgment by a special mission is extremely gratifying to me, and I beg you to be the medium of communicating to President DIAZ the expression of my own high appreciation of this friendly action.

For your personal good wishes, which I heartily reciprocate, I thank you, and I bid you welcome to Washington, trusting that your stay here will be a most agreeable one.



# LATIN-AMERICAN NOTES

## SOUTH AMERICAN MARKET FOR UNITED STATES COAL.

The Pan American Union is in receipt of a most interesting communication from Mr. SPENCER B. GREENE, who is now making a business trip through the interior country of Argentina, Brazil, and Paraguay.

Referring to the possibility of introducing United States coal, he writes:

"Posadas, the capital of the Province of Misiones, is located on the Parana River, at the point where the new railroads which are now in construction will have to cross, thereby giving direct railroad communication with Asuncion, the capital of Paraguay.

"While there I was interested in coal and wood prices, as I sell a steam boiler. Here I found a large electric lighting plant and several shipyards all burning coal at about $23 (Argentine gold) a ton. This fuel at present is brought up from Buenos Aires to Corrientes and transshipped to Posadas, a long and difficult process.

"The above-mentioned railroads are the North Eastern Argentine Ferrocarril and the Central Paraguay, and I have the statement from the superintendent of the former that through communication, via railroad ferry at Posadas, will be established from Concordia, the headwater of Uruguay river transportation, to Asuncion by the 1st of February, 1911.

"At Posadas alone I can safely guarantee the consumption of coal is 1,000 tons monthly, while over the river is a coal depot which disposes of 500 tons monthly to lower Paraguay. In addition to these, of course, there will be the supplying of the two railroads, provided prompt and proper terms are made. As I have said, steamers go to Concordia, and when put in cars it does away with further handling."

Mr. GREENE then speaks of the remarkable tropical beauty of this upper region, and continues:

"The Alta Parana is a river whose scenery varies from the ragged cliff, which recalls the Palisades of the Hudson, to the rolling caps or prairies of our northwestern plains, while at intervals, through breaks in the beautiful tropical forest of palm and fern trees, miniature Niagaras fall over high banks into the rushing Parana.

"But the climax comes when, after three days of this glorious Parana, you reach the "Wonderland of South America," the Falls of Iguasu. It is a 17-kilometer ride on mules after you leave the boat, but as I stood on the brink and looked down and across this magnificent array of every natural wonder, from duplicates of the double leap of the Yellowstone to the mighty horseshoe of our Niagara, I could not but wonder that our American tourist did not devote a little of his time and money in seeing his own continent before spending so much in Europe.

"For a matter of comparison I venture to remind you of the comparative dimensions—Niagara is 160 feet high and about four-fifths mile across, while its rival of the south, the mighty Salte of the Iguasu, is 197 feet high and 2½ miles across.

"South America is a great land of opportunity, and, as one writer has put it, the cry of the present is, "Southward ho, instead of westward."

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The American Society of Tropical Medicine will hold its eighth annual meeting in New Orleans on Thursday and Friday, May 18 and 19, 1911. This society, as its name implies, gives special attention to the study of diseases of the Tropics in all parts of the

world, as well as to conditions of climate and hygiene which may affect life, so that the human race in its expansion into hitherto unoccupied places may be forewarned and therefore forearmed against charges in environment. Every person interested in the problems presented in such a field is invited to attend. The secretary of the organization is Dr. JOHN M. SWAN, The Glen Springs, Watkins, New York, and correspondence should be sent direct to him.

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The American Historical Association held its twenty-sixth annual meeting in Indianapolis December 27–30, 1910. The program was unusually full of topics bearing particularly upon the history of events that occurred on American soil, although several papers were devoted to ancient and earlier European history as well. What was of special interest, however, was the fact that at this meeting practical steps were taken to establish a new section and to perpetuate it in future meetings, which may be called a section devoted to the study of Latin American affairs. On this occasion the conference in charge of the matter was held on Wednesday afternoon, December 28, and was announced under the subtitle "American diplomatic history, with special reference to Latin American relations." Three papers were read: "George Canning's policy respecting the Oregon boundary question," by JOSEPH SCHAFER, of the University of Oregon; "The Mexican policy of southern leaders on the eve of the Civil War," by JAMES M. CALLAHAN, of the University of Virginia; and "Trade and diplomacy between the United States and Latin America," by JOSEPH H. SEARS, of New York. Considerable discussion was aroused by the last paper, and so decided an interest was manifested, not alone in the historical side but also in the increasing activities of the day throughout Latin America, that there was an enthusiastic movement to give greater attention to the subject at the next annual meeting.

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### SECOND INTERNATIONAL BREWERS' CONGRESS.

In connection with the American Exposition of Brewing Machinery, Materials, and Products, to be held at the Coliseum, Chicago, Illinois, United States of America, October 12 to 22, 1911, there is also to convene the Second International Brewers' Congress, from the 18th to the 22d. A special feature of the exposition is the second international barley and hop prize exhibit and educational exhibit. Representatives to the congress are expected from all parts of the world, while entries have already been received for exhibits in the barley and hop competition from many countries. Full particulars and pamphlets concerning all these events may be obtained from H. E. O. HEINEMANN, secretary, Second International Brewers' Congress, 1508 Republic Building, Chicago, Illinois.

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### NEW UNITED STATES IMMIGRATION REGULATION.

On and after January 1, 1911, in order to comply with the amended rule 29 of the Immigration Service of the Department of Commerce and Labor, it will be necessary for agents in booking outwardbound passengers to secure the following information, without which tickets will not be furnished nor honored. Exchange orders will also be subject to the requirements and will not be honored unless the passenger gives the specific information.

Herewith is copy of blank form issued by the Government and instructions as to the way it is to be filled out:

INFORMATION REQUIRED BY UNITED STATES LAW OF EACH ALIEN PASSENGER, WHETHER FIRST, SECOND, OR THIRD CLASS, WHO SAILS FROM A PORT OF THE UNITED STATES TO A FOREIGN PORT.

[If United States citizen, that fact should be stated and sex and approximate age given. No other information is required of United States citizens.]

| | Passenger (1). | Passenger (2). | Passenger (3). |
|---|---|---|---|
| (1) Family name | | | |
| (2) Given name | | | |
| (3) Age | | | |
| (4) Sex | | | |
| (5) Country of which citizen or subject | | | |
| (6) Race | | | |
| (7) Country where you lived before coming to the United States | | | |
| (8) Time of last arrival in the United States | | | |
| (9) Where you last lived in the United States: City or town | | | |
| State | | | |
| (10) Country where you are going to live | | | |
| (11) Occupation | | | |

Ticket will not be accepted and holder will not be allowed to go on board unless this coupon has been properly filled out.

Passengers landing at.....

from.....on the.....day of....., 191 , sailing .....class passengers on S. S. .....line

## EXPEDITION OF HENRY SAVAGE LANDOR.

The famous English explorer and author, Henry Savage Landor, has recently completed arrangements for his expedition which will cross South America from the Atlantic to the Pacific along the 11th parallel. Mr. Landor has undertaken a work fully as important as that accomplished by him in Thibet and in Africa, for a greater portion of the country lying between Araguaya River and the Madeira in Brazil is uncharted. The Brazilian Government has contributed $10,000 toward the expedition, which will start from Rio de Janeiro in a very few months. The Bulletin conveys its best wishes for the complete success of this expedition.

# ARGENTINE REPUBLIC

## THE INAUGURAL MESSAGE OF PRESIDENT SÁENZ PEÑA.

We give below an extract of the important message read by the President of the Argentine Republic, Dr. ROQUE SÁENZ PEÑA, at his inauguration on October 12, 1910. The Pan American Union is indebted to Señor JACINTO L. VILLEGAS, Chargé d'Affaires of the Argentine Republic in Washington, for the copy of this document which he has courteously furnished.

After taking the oath, the distinguished President referred to his obligations toward the nation, and then said:

We owe it to the world to let the truth be known; and when we receive from abroad impressions that are injurious to the national "amour propre," it will be only just to remember that, if the offense is magnified by the distance traversed, the pessimistic utterances emanated from ourselves. Let us not belittle ourselves; let our actions have a national scope and meaning. Let us unite for the power of Argentina rather than divide by fruitless squabbles. Let us abide by the decision of the polls; and, imperfect as the system may be, let us strive to make it better instead of reflecting discredit upon it by protest or by abstention. Help me to give effect to this sincere prayer of the patriot. May the majorities not abuse their triumph nor the minorities evade their responsibilities under cover of apologies and excuses.

Do not let it cause you surprise that in the initial function of my term of government I am preoccupied by the impression conveyed to the foreign nations in recognition of the spiritual influence they naturally have upon our organic life. This is a point that is worthy of at least a double measure of circumspection in the proceedings I have in view, subject to the necessary control of the country and to the acute observation of foreign nations. I have no hesitation in admitting the fact, nor have I forgotten that I have to pass in review before the judges.

As regards my international policy, you are already acquainted with it. It will be one of friendship for Europe and fraternity for America. I participate in the Pan American concept so far as regards the inviolable respect of national sovereignty, concord, and friendship amongst all the States of the continent, without prejudice to the mutual rivalries which the economical development of the respective States may produce. It is not convenient that the policy of Argentina should be either strictly American or exclusively European, nor shall we have to divide into two geographical portions the universal convenience which demands harmony and cooperation rather than defensive actions and counteractions.

Referring to home affairs he said:

Rebellion has positively terminated owing to the work of our great people. The atmosphere kills revolutionaries and honor conquers the conspirators. Amongst questions requiring early solution are the improvement of the working classes, reduction of prices of articles of prime necessity, and an increase in progressive death duties and those of *latifundios*. Indemnity for workmen injured was of urgent necessity, as also the construction of hygienic and cheap houses for them. Public expenses should conform to the limits of revenue. Official charity in the form of pensions and subsidies needs to be restricted and systematized. Public instruction will occupy the attention of the Government. Education, conscription, and the public vote are for me the three

columns which, technically speaking, we shall have to help us in the erection of the solid edifice of our future.

This capital absorbs to excess the vitality of the Republic and measures should be adopted to land emigrants farther south and make provision for them.

In conclusion he said:

Gentlemen of the Senate and Chamber of Deputies, the division of power is not the division of men; on the contrary, it makes for cohesion, consideration, and respect. I shall cultivate with the greatest care the harmonious relations between the governmental departments and within the faculty of each, because functional independence is the pride of each department and a credit to the State.

I have given expression to my governmental proposals and my desires as a citizen, my conception of the exigencies of national actuality and of prevision for the future. I have also loyally confessed my inmost sentiments, my recognition of the great responsibilities I assume, my confidence in your valuable cooperation, and my profound faith in the patriotism of the Argentine people, all of which, combined with the work of everyone, will advance us along the road to fulfillment of the prophecy of the men who formed this Republic, that it will one day be one of the great nations of the world.

May Divine Providence watch over the Argentine nation and lighten the road along which has to pass the one to whose lot has fallen this arduous mission.

## THE INDUSTRIAL EXPOSITION.

The great National Industrial Exposition of Buenos Aires, organized by the Argentine Industrial Union, and inaugurated on September 15, last, has been crowned with a success which has exceeded the most optimistic predictions. It has served to show to the world the stupendous potentialities of the Argentine Republic as an industrial nation and the brilliant future which awaits it in this branch of national activities.

The buildings and pavilions of the exposition attracted a great deal of attention on account of the artistic taste displayed in their construction, and it is safe to assert that, from an architectural standpoint, they are superior to those of many of the expositions held throughout the world.

The thousands of products and articles exhibited were convincing proofs of the quantity and quality of Argentina's manufacturing capacity. To obtain an idea of its importance, it is sufficient to quote some figures from the last industrial census. According to this report, the total number of manufacturing establishments in the Republic in 1910 was 31,996, with a capital of $339,073,230 gold; their sales amount annually to $544,505,412 gold, a production greater than the cattle output; these factories utilize a motive power equivalent to a total of 229,692 horsepower and employ 327,893 laborers.

To the Argentine Industrial Union, the most influential private institution of its kind in the Republic, we extend our warmest congratulations for the wonderful result of the exposition and for the present progress of the national industries, which, in a large measure, is due to its unceasing and efficient labors.

## FREE ENTRY OF GALVANIZED IRON.

By presidential decree of recent date, the entry of galvanized iron for the extermination of locusts shall be free of duty, if imported under the provision of this decree.

## COMMERCIAL PORT IN SAN BLAS.

The Minister of Public Works of the Argentine Republic has approved the plans submitted by Señor FRANCISCO MALHALL in accordance with the provisions of law No. 4914, for the construction of a commercial port in the Bay of San Blas, and of a wharf on the shores of Rio Negro opposite the city of Carmen de Patagones. The work of construction shall be strictly governed by the terms of the contract, signed by the concessionaires on May 12, last. It must be started within six months and completed within two years.

## AN IMPORTANT INVENTION.

In the Parana River, near the new wharves of the port of Rosario, Santa Fe Province, the first test was recently made of an Argentine invention. It is a turbine for the generation of water power, invented by Messrs. JUAN JOSE FALLON and JORGE MIAZZI, who have named it "Nueve de Julio," and who have already secured the necessary patent. In the tests the turbine recorded a movement of 40 revolutions per minute.

## THE MATCH INDUSTRY.

The rapid growth of the match industry in the Argentine Republic is readily shown by the import figures, which indicate a steady decline in the quantity entering the country and by the corresponding increase in the local production and value.

Up to 1883 matches were imported by the gross of boxes; after that year the unit of measure was changed to weight. During the five-year period, 1884–1899, 330,449 kilograms were imported; from 1889–1893, the total amount imported dropped to 7,042 kilograms; the next five years saw an increase amounting to 123,469 kilograms.

From 1898 to 1910 the figures show a considerable decline in the import of this commodity, disappearing completely in some years, with the exception of small quantities imported through the free ports to the south of the Republic.

Its importance as an industry in Argentina and its development there is best shown by the following table, indicating the number of factories engaged in the manufacture of matches and the value of their annual sales.

| Provinces and Territories. | Number of factories. | Value of annua sales. |
|---|---|---|
| | | *Pesos (paper).*[1] |
| Federal Capital | 4 | 750,000 |
| Buenos Aires | 4 | 2,746,666 |
| Entre Rios | 1 | 580,000 |
| Cordoba | 1 | 450,000 |

[1] Peso (paper) equivalent to 44 cents United States currency.

### MAR DEL PLATA PORT WORKS.

The plans and bids submitted by Messrs. SILLARD, DOLLFUS, ALLARD, and WIRIOT, who are also the contractors for the port of Montevideo, for the port works of Mar del Plata, at a cost of $11,400,000 gold, have been approved by the Argentine Government.

### FOREIGN TRADE, FIRST NINE MONTHS, 1910.

During the first nine months of the year 1910 the value of the imports into the Argentine Republic amounted to $261,682,742 gold, an increase of $41,090,191 gold over the same period of 1909.

Classified according to the countries of origin, the imports were:

| | Gold peso.[1] |
|---|---|
| Germany | $45,408,846 |
| Africa | 39,941 |
| Austria-Hungary | 2,466,752 |
| Belgium | 14,450,591 |
| Bolivia | 104,542 |
| Brazil | 6,801,836 |
| Chile | 346,194 |
| Spain | 3,274,194 |
| United States | 34,267,019 |
| France | 25,463,054 |
| Italy | 25,175,855 |
| Holland | 1,846,916 |
| Paraguay | 1,137,988 |
| Great Britain | 82,799,593 |
| Uruguay | 1,746,936 |
| Various | 16,352,485 |
| Total | 261,682,742 |

The value of the exports from January 1 to September 30 was $278,880,579 gold, or a decrease of $47,956,503 compared with the same period in 1909.

The exports, classified according to principal countries, were as follows:

| | Gold peso.[1] |
|---|---|
| Africa | $298,314 |
| Germany | 33,487,382 |
| Austria-Hungary | 1,179,423 |

[1] The gold peso of the Republic has a value of $0.965 United States gold.

| | Gold peso. |
|---|---|
| Belgium | 22,792,642 |
| Bolivia | 492,145 |
| Brazil | 13,200,186 |
| Chile | 2,044,875 |
| Spain | 1,704,895 |
| United States | 18,472,168 |
| France | 25,231,445 |
| Italy | 6,567,041 |
| Holland | 2,600,375 |
| Paraguay | 137,597 |
| Great Britain | 60,832,260 |
| Uruguay | 1,265,941 |
| Various | 5,889,166 |
| Other countries, to orders | 82,684,724 |
| Total | 278,880,579 |

## ROSARIO AND CONSULAR DISTRICT TRADE NOTES.

From reports submitted by United States Consul H. P. Coffin, at Rosario, the Rosario Electric Light Company will spend a million dollars improving their service. A new factory is to be constructed capable of producing 30,000 horsepower and equipped with the most modern turbine engines.

The provincial legislature of Santa Fe has sanctioned the construction of a central avenue in Rosario, to be 1,200 meters long and 42 meters wide. The avenue will extend from Plazo 25 de Mayo through the heart of the city to Plaza Santa Rosa, will lessen the congestion of the narrow streets and greatly enhance property values in Rosario.

Work on the Rosario port works is rapidly forging ahead. In the past six months 10 new warehouses have been constructed to accommodate the increased imports of the city.

There are in the Province of Santa Fe 2,951 industrial establishments, over 80 per cent of which are in the hands of foreigners. They carry an aggregate capitalization of $21,065,764 United States gold, and employ approximately 21,000 people.

## PROPOSED SETTLERS' BANK.

The Director General of Immigration of the Argentine Republic has submitted to the Minister of Agriculture a proposal for the establishment of an agricultural and settlers bank. The object of this institution is to place colonization upon a sound basis by making the necessary improvements on the land previous to the arrival of the colonists, by providing them with everything necessary for facilitating the working of the land, the construction of dwelling houses, implements, animals, etc.

### LOAN FOR BUENOS AIRES.

The municipality of Buenos Aires has been authorized by law of Congress to raise a loan of 15,000,000 pesos paper (about $6,600,000 gold) in bonds bearing interest not to exceed 5 per cent and 1 per cent amortization. The municipality is further authorized to issue the bonds to the full amount, or in three series of 5,000,000 pesos each. The first series must be issued as soon as possible, and the income from their sale shall be deposited with the National Board of Education to liquidate all obligations pending at the close of 1910. The remainder of the loan shall be devoted to public works in the capital.

### FREE ENTRY OF MATERIALS FOR PUBLIC WORKS.

By a recent presidential decree, the customhouses of Argentine Republic shall admit free of duties all materials which may be introduced into the country for use in public works, provided they are imported under contracts stipulating that their admission shall be free.

### INDUSTRIES OF CORRIENTES AND TUCUMAN.

The industrial census of the Argentine Republic, which is now approaching completion, has recently issued some statistics on the provinces of Corrientes and Tucuman.

It appears there were 620 factories and workshops in each of these provinces on April 30, 1910. Those in Corrientes are capitalized at $2,160,121.22 (United States currency) and have an annual output valued at $4,012,509.90 (United States currency), while those in Tucuman are capitalized at $3,100,919.70 and have an annual productive value of $5,821,306.12. Bakeries, fruit, and yerba maté establishments, and the preparation of quebracho extract are the leading Corrientes industries; sawmills and electrical establishments are those of Tucuman in addition to the sugar industry in that province.

### MISCELLANEOUS CONSULAR NOTES.

The sheep exported from the Argentine Territories of Santa Cruz and the Chubut have done very well in Peru, and it is probable that more will be sent. In the opinion of experts, these rich and undeveloped Territories will, within the next 10 years, be able to send large numbers of live animals throughout the world.

Dr. Eleodoro Lobos, the Minister of Agriculture, is doing everything in his power to promote and judiciously regulate immigration. Reduced fares have been obtained for immigrants who are to settle in the Territories of Santa Cruz and the Chubut, and official regulations have been issued governing the sale of tickets to immigrants for friends at home who may desire to go to the Argentine Republic.

## FREE ZONE IN CONCEPCION DEL URUGUAY.

By a recent law of Congress the President of the Argentine Republic has been authorized to establish a free commercial zone in the port of Concepcion, on the Uruguay River.

## THE BUDGET OF BUENOS AIRES FOR 1911.

In the proposed budget for the municipality of Buenos Aires during the year 1911 the revenues are estimated at 36,603,286.56 pesos paper (about $16,105,446 United States gold) and the expenses fixed at 35,123,701.81 pesos paper (about $15,454,428.80 United States gold).

## ANOTHER TRANSANDEAN LINE.

The Argentine Congress has recently enacted a law authorizing the construction of a narrow-gauge railroad line which, starting at the village of Tinogasta, in Catamarca, shall run as far as the Chilean frontier in San Francisco Pass. The line will cover a distance of 252,743 meters, and is estimated to cost $8,122,460 gold.

At San Francisco it may connect with a branch line of the Copiapo or the Taltal Railway, thus forming another trans-Andean line.

## IRRIGATION IN NEUQUEN.

The Minister of Public Works of the Argentine Republic has approved the plans for the network of distributing canals for irrigation in the Territory of Neuquen. The irrigation board has been authorized to execute the works of the secondary canals at a cost of $14,525 gold.

## THE ROSARIO-PUERTO BELGRANO RAILWAY.

The formal opening of the Rosario and Puerto Belgrano Railway took place on the 15th of December, 1910. This line was built by a French company under a concession from the Federal Government. It traverses the provinces of Santa Fe and Buenos Aires, between the points named, a distance of approximately 490 miles, and passes through a fertile agricultural region.

## RAILROAD NOTES.

The Buenos Aires Southern, with its 3,038 miles of line, is now the largest Argentine railway system, exceeding the Buenos Aires & Pacific lines by 10 miles.

The Rosario Western Railway Company, recently registered in London, is contemplating a new railroad in the Province of Santa Fe.

During the first nine months of the year 1910 the Rosario Tramway Company transported 16,116,452 passengers, as compared with 13,549,659 in the corresponding months of 1909.

# BOLIVIA

## NEW CABINET.

The President of Bolivia has reorganized his Cabinet as follows:

Minister of Foreign Relations and Worship, Señor Doctor José Maria Escalier.

Minister of the Interior and Promotion, Señor Doctor Juan Miguel Saracho.

Minister of Finance and Industry, Señor Don Carlos Torrejo.

Minister of Agriculture and Colonization, Señor Doctor Manuel B. Mariaca.

Minister of Justice and Public Instruction, Señor Don Arturo Loaiza.

Minister of War, Señor Julio La Faye.

## THE COAL INDUSTRY.

A great impetus has been given the exploitation of coal in the Copacabana Peninsula, on the Bolivian side of Lake Titicaca, the deposits of which could, according to official estimates, yield 40,000 tons annually. The Government, on its part, is devoting considerable attention to the industry, the development of which would result in the establishment of tin smelters in the country. Thus Bolivia, instead of exporting its tin mostly in barrillas, as it now does, would ship it in bars. This would naturally enhance the value of the article, besides furnishing employment to a larger number of laborers.

## OPENING OF PORTS.

In order to effectively promote the new coal industry in Yampupata and Titicachi, the President of Bolivia has opened, as minor ports, those situated on Lake Titicaca.

## FOREIGN COMMERCE.

The statistics of the foreign commerce of Bolivia during the first nine months of 1910 show an increase of 12,861,026.42 bolivianos (about $4,887,190 gold) over the same period of 1909. The total exports amounted to 47,709,138.96 bolivianos ($18,129,472.80 gold) as compared with 42,424,392 bolivianos ($16,121,269 gold) in 1909. The imports totaled 32,498,695.19 bolivianos ($12,349,504.17 gold) against 24,922,415.73 bolivianos ($9,470,518 gold) in 1909.

## CUSTOMS SURTAX.

The Bolivian Congress has enacted a law levying a surtax of 10 cents of bolivians (about 4 cents gold) on each quintel of merchandise

that may be imported or exported through the ports of Antofagasta, Arica and Mollendo. The revenues from this surtax are to be devoted exclusively to the payment of the principal and interest of the loan of £300,000 raised for the Cochabamba Electric Light and Power Company.

## EXPORTS FROM NEW YORK AND SAN FRANCISCO TO BOLIVIA FOR 1910.

The Pan American Union is in receipt of the following table containing a detailed statement of the merchandise exported from New York to Bolivia during the year 1910, and other valuable data on the exports from San Francisco to Bolivia. The figures have been prepared by the Consul General of Bolivia at New York, and the Consul at San Francisco, respectively, and have been furnished the BULLETIN through the courtesy of Senor Don IGNACIO CALDERON, the Bolivian Minister at Washington.

*General survey of exports from New York to Bolivia for 1910.*

| Month. | Number of packages, bundles, etc. | Weight in kilograms. | Duty paid. | Value of merchandise. |
|---|---|---|---|---|
| January | 8,057 | 424,072 | $1,402.38 | $72,189.35 |
| February | 7,592 | 378,991 | 1,144.45 | 57,200.99 |
| March | 4,029 | 212,291 | 751.72 | 48,107.35 |
| April | 7,881 | 409,039 | 1,414.86 | 74,362.72 |
| May | 5,140 | 200,409 | 1,127.44 | 60,481.78 |
| June | 8,139 | 356,309 | 1,177.42 | 64,783.18 |
| July | 5,978 | 234,082 | 917.34 | 51,924.32 |
| August | 2,322 | 121,313 | 625.11 | 30,724.68 |
| September | 6,850 | 322,357 | 1,567.61 | 77,631.39 |
| October | 17,650 | 565,548 | 2,330.02 | 118,414.98 |
| November | 5,362 | 246,159 | 1,380.76 | 69,699.66 |
| December | 7,848 | 355,894 | 1,516.67 | 76,686.46 |
| Total | 86,848 | 3,826,464 | 15,355.78 | 802,206.86 |

*Surveys of exports, by articles, from San Francisco to Bolivia for 1910.*

| Articles exported. | Number of packages, bundles, etc. | Weight in kilograms. | Value of merchandise. |
|---|---|---|---|
| Flour | 226,810 | 10,665,216 | $440,644.65 |
| Preserves | 2,748 | 85,390 | 10,264.34 |
| Lumber | 57,472 | 1,479,117 | 14,496.00 |
| Railroad sleepers | 71,264 | 2,993,088 | 28,380.00 |
| Machinery | 1,253 | 120,149 | 15,008.98 |
| Powder, ammunition | 8,105 | 113,951 | 12,050.00 |
| Furniture | 41 | 4,393 | 2,297.40 |
| Fat and oils | 734 | 94,747 | 6,935.00 |
| Miscellaneous | 382 | 16,529 | 3,023.70 |
| Total | 368,809 | 15,572,580 | 533,100.07 |

The total exports to Bolivia from these two ports, for the year 1910 amounted to $1,335,276.93.

# BRAZIL

## RATIFICATION OF ARBITRATION TREATIES.

The Brazilian Government approved, on December 29, 1910, the arbitration treaties concluded with China, Colombia, Haiti, and the Dominican Republic, also the resolution adopted by the Third Pan American Congress on the Pan American Railway.

## BUDGET FOR 1911.

The budget law for 1911, as published in the "Diario Oficial" of recent date, estimates the expenditures and revenues for the coming year, as follows:

| | |
|---|---|
| Ordinary revenues | [a] $132,496,783 |
| Extraordinary revenue | 13,907,666 |
| Total | 146,404,449 |

The revenues, ordinary and extraordinary, are estimated from the various sources, as follows:

| | |
|---|---|
| Import duties | $83,479,000 |
| Wharf and lighthouse dues | 258,000 |
| Ten per cent on goods imported free of duty | 120,000 |
| Excise duties | 13,928,400 |
| Internal revenues | 34,711,383 |
| Receipts to be applied to redemption of paper money | 7,337,666 |
| Receipts to be applied to redemption of railway bonds | 1,130,000 |
| Receipts to be applied to amortization of internal loans | 915,000 |
| Receipts from tax for port-improvement fund | 4,525,000 |

The expenditures for the year 1911 are fixed at a sum approximately equal to the total receipts above estimated.

## TRADE OF BRAZIL, FIRST NINE MONTHS, 1910.

If the figures for Brazil's foreign trade during the first three-quarters of the year just ended are to be taken as an index of what the totals for 1910 will be, it may be assumed that all records will be broken for the annual foreign commerce of that country, according to a recent consular report from Rio de Janeiro. Up to the end of September, the total exports and imports amounted to $377,623,947 as compared with $320,989,399 for the same period in 1909. The general figures are as follows:

| | 1908 | 1909 | 1910 |
|---|---|---|---|
| Exports of merchandise | $136,997,465 | $191,906,867 | $216,152,305 |
| Imports of merchandise | 130,540,772 | 129,082,532 | 161,471,642 |

[a] United States currency.

It will be noted from the above figures that the total volume of trade was greater that year than ever before.

The exports, by principal articles, for the period under review were as follows:

| | 1909 | | 1910 | |
|---|---|---|---|---|
| | Quantity. | Value. | Quantity. | Value. |
| Coffee.....bags.. | 9,847,504 | $92,500,039 | 6,283,527 | $75,525,799 |
| Rubber.....tons.. | 27,891 | 58,603,657 | 29,024 | 96,396,640 |
| Tobacco.....do.... | 26,645 | 5,918,300 | 32,908 | 7,505,753 |
| Sugar.....do.... | 45,081 | 2,094,689 | 58,031 | 3,260,286 |
| Herva maté.....do.... | 40,144 | 5,521,777 | 41,368 | 6,354,329 |
| Cacao.....do.... | 22,675 | 5,253,661 | 18,952 | 4,429,437 |
| Cotton.....do.... | 5,770 | 1,507,254 | 6,256 | 2,563,000 |
| Hides.....do.... | 28,277 | 6,793,172 | 28,202 | 6,682,422 |
| Skins.....do.... | 3,136 | 3,675,214 | 2,237 | 2,804,905 |
| Total of nine articles..... | ..... | 181,767,763 | ..... | 205,522,579 |
| Miscellaneous..... | ..... | 10,139,104 | ..... | 10,629,726 |
| Total exports..... | ..... | 191,906,867 | ..... | 216,152,305 |

It will be seen that the principal factor in the increased total of exports continues to be the high price of rubber. There is the increase in quantity of little more than a thousand tons, with upward of $40,000,000 increase in value as compared with last year. Conditions have been favorable to a good crop of tobacco in Bahia and shipments have been heavier than usual despite the decline in prices. The production of sugar has likewise been more than ordinarily heavy, while the great advance in prices of cotton in Liverpool has been responsible for the increase in value of cotton shipments.

## SAO PAULO GOVERNMENT COFFEE.

The committee charged with the management of the State of Sao Paulo Government coffee, has issued, under date of January 5, 1911, the following statement:

1. With reference to clause 6 of the circular of the coffee trade, dated January 6, 1911, the committee states that 1,200,000 bags of coffee will be sold between April 1 and 30, 1911, and that no more Government coffee will be sold during the current year.

2. The sales will be made in all the different coffee markets where the Government stocks are now stored, and will be distributed in proportion to the requirements of those centers.

3. The committee will announce the intended sales for 1912–13 early in 1912.

## PREFERENTIAL TREATMENT TO CERTAIN IMPORTS FROM THE UNITED STATES.

The new budget of Brazil continues in force the preferential reduction of 20 per cent on certain articles imported from the United States. These articles are wheat flour, condensed milk, manufactures of india rubber, clocks and watches (including alarm clocks), inks (with the exception of writing ink), colors and varnishes, type-

writers, refrigerators, pianos, scales, windmills, cement, dried fruits, desks, corsets, and school furniture. A reduction of 30 per cent may be made on wheat flour.

### CAROA—NEW FIBROUS PLANT.

The Pan American Union is in receipt of the following information from Mr. Louis Raposo, a Brazilian gentleman resident in Philadelphia, concerning a new fibrous plant indigenous to the wilds of Brazil:

Among the new things found growing in the vast wilds of Brazil is a fibrous plant called "caroa," of which the supply is apparently inexhaustible. The plant is produced from a bulb and is of rapid growth. When stripped, at maturity, of its fiber it takes but six months under the coaxing influence of the Brazilian sun and soil to reproduce a full-length crop from 6 to 8 feet in length.

Mr. Raposo states that shipments of the fiber sent to London and manufactured into rope, as tested by English engineers, show a tensile strength ten times greater than manila rope of like dimension. As compared with other products from which rope and twine are made the caroa gives a 10 per cent greater outturn of finished material from the same weight of raw material.

"Tests of caroa rope," he says, "for use on shipboard show great wearing quality as well as other superiorities. The rope does not swell with wetting. In three round trips from London to Bombay the rope gave no appearance of serious damage.

"It takes 20 tons of the green caroa to make 1 ton of the fiber ready for shipment, but a large part of the wastage is said to be suitable for making paper. This, if true, would give the plant a far more considerable value. The cost of the fiber as rudely produced in Brazil and laid down in London was $80 per ton. This cost would be largely reduced by economical handling. The discovery of this new fiber, if what is claimed for it be true, is a most important addition to the raw material of manufacture."

Mr. Raposo further informs us that, although repeated tests with this plant were made in England, it is his intention to introduce the fiber extensively in this country, and that he has already succeeded in interesting several prominent institutions in its use.

### TO PROMOTE RUBBER CULTURE.

A bill has recently been submitted to the Chamber of Deputies of Brazil authorizing the Executive to grant special concessions to national or foreign companies who engage in the cultivation and extraction of rubber, preferably in the Amazon Valley. The bill provides for the following bounties: A 5 per cent guarantee of interest on a capitalization of £600,000 during the first 10 years; exemption from customs duties on all material imported by the company; free

transportation of material and laborers imported for the plantations on all Government railway and navigation lines; a reduction of 50 per cent in the export tax levied on rubber produced in the Acre Territory. The company, on the other hand, must plant no less than 4,000 rubber trees per year.

### LIGHT AND POWER FOR THE CITY OF CORUMBA.

A company has been organized at Sao Paulo known as the "*Companhia de Electricidade de Corumba,*" with a capital of 335,000 milreis (approximately $100,000 United States gold), for the purpose of furnishing electric light and power to the city of Corumba, in the State of Matto Grosso.

### THE FISHING INDUSTRY.

The Santos Fishing Company (*Companhia Santista de Pesca*) recently ordered eight large refrigerator cars for the transportation of their products over the various railways of the State, and a number of automobiles, equipped with cold-storage chambers, for use in house delivery at Sao Paulo and Santos. The company is enlarging its fleet of fishing vessels, and contemplating a number of other improvements, among which is the construction of a large cold-storage warehouse at Santos, with a capacity of 200 tons.

### PROJECTED IMPROVEMENT OF THE PORT OF ARACAJU.

An appropriation of 25,000 milreis (approximately $75,000 United States gold) has been voted by the Department of Public Works to cover the expenses of preparing plans and estimates for improvement works at the port of Aracaju, State of Sergipe.

### DISCOVERY OF LARGE DIAMOND.

There was recently found at Bagagem, in the State of Minas Geraes, a large diamond weighing 174 carats. It was purchased by a local jeweler for 500 contos (about $150,000).

### KAOLIN DEPOSITS.

Valuable deposits of kaolin have recently been discovered in the municipal district of Encruzilhada, in the State of Rio Grande do Sul. It is estimated that the deposits contain thousands of tons of this precious mineral, and an English company has already obtained a concession to work them.

### EXPORTS OF BRAZILIAN NUTS.

The ports of Belem, Obidos, Itacoatiara, and Manaos exported from January 1 to July 20, 1910, 178,097 hectoliters of Brazilian nuts. Of this amount 113,074 hectoliters were exported to the United States, and 55,023 hectoliters to Europe. (The hectoliter is equivalent to approximately 2⅝ bushels.)

### EXPORTS OF PINE, 1909.

From the State of Parana there were exported during 1909, 274,771 pine planks, valued at 826,145 milreis (about $247,843 United States gold), and 438,484 boards, valued at 123,690 milreis ($37,107 United States gold).

### LIVE STOCK INDUSTRY.

According to official statistics there are at the present time in the State of Rio Grande do Sul 10,684,417 head of cattle, valued at 230,906,173 milreis ($69,271,851 United States gold), distributed as follows: Bovines, 5,659,768; horses, 777,372; mules, 31,713; sheep, 3,150,800; goats, 48,101; hogs, 1,020,417.

### AGRICULTURAL AND LIVE STOCK EXPOSITION.

An exposition of fruits, vegetables, and live stock will be held at Recife (Pernambuco) from March 9 to 12, inclusive. The exhibition will be the first of its kind ever held in this city, and prizes will be awarded for the best products.

### AUTOMOBILE SERVICE IN MINAS GERAES.

The municipality of Santo Antonio do Machado, in the State of Minas Geraes, has granted a concession to two residents of Sao Paulo for the privilege of operating an automobile service between the cities of Pouso Alegre and Alfenas, State of Minas Geraes.

### NEW CABLE BETWEEN BRAZIL AND LIBERIA.

A Reuter telegram dated at Berlin January 11, advises that the *Stephan,* a cable-laying steamer, left Bremen on that day to lay the third and last section of the German West African and Brazil cable between Monrovia, Liberia, and Pernambuco, a distance of 2,149 miles. It is expected that the cable will be open for service about the end of March.

### BRANCHES OF BANK OF BRAZIL.

It is reported that the president of the Bank of Brazil is about to visit New York, London, and Paris for the purpose of establishing branches of his institution at these points. This will mark the first steps of a plan which has been contemplated for some time by the various banking firms of South America.

### SALE OF BONDS OF THE MADEIRA-MAMORE RAILWAY COMPANY.

The Port of Para Company has authorized the Bank of Scotland and the Manchester and Liverpol District Banking Company (Limited) to receive subscriptions on behalf of the company for £450,000 of 6 per cent first mortgage 60-year bonds of the Madeira-Mamore Railway. These bonds form part of the amount purchased by the

Port of Para (£900,000), and are guaranteed, both principal and interest, by that company and are convertible, at the holder's option, into 6 per cent participating preferred stock of the Port of Para at par.

### RAILWAY LINE BETWEEN ITAICY AND CAMPINAS.

The legistature of the State of Sao Paulo has authorized the construction of a line between Itiacy and Campinas. This line will connect all the lines of 1 meter gauge of the States of Minas Geraes, Sao Paulo, Goyaz, Matto Grosso, Parana, Rio de Janeiro, and Espirito Santo with Rio Grande do Sul and the Republics of the River Plata and Paraguay on the southern frontier.

### NEW RAILWAY CONCESSIONS.

By a decree of recent date, the Government of Brazil grants to the Sao Paulo-Goyaz Railway Company or to a company which it may organize, the right to build 120 kilometers of railway line from Monte Azul, in the municipal district of Bebedouro, State of Sao Paulo, to the banks of the Rio Grande, which divides this State from Minas Geraes. The line will benefit especially the colonies Cresciuma, Portao do Ceo, and Corrego Rico. The company will receive a subsidy of 15,000 milreis (about $5,000 United States currency) for each kilometer of line built.

The Government has also approved a contract entered into with the *Companhia Amparo Industrial* for the construction of a line 100 kilometers in length from Villa Nova, on the Leopoldina Railway, to Santa Rosa, on the banks of the Muriahe River; and thence to Cardoso Moreira, on the same railway, together with a branch running along the Muriahe River as far as Campos, in the State of Rio de Janeiro.

The Minister of Transportation and Public Works has approved the plans for the extension of the Goyaz Railway from Ipamory to Antas, a distance of 159 miles, the first-named station being 122 miles above the initial station of the road. In another order further plans for the extension of the same railway from Perdicao to Palestina have been given final approval. This section of the line is to be 263 miles in length and will cost $2,100,000 to build, according to specifications now accepted.

Final plans for the extension of a branch of the Central of Brazil Railway which will connect the station, G. Portella, on that railroad with Vassouras on the Spaucahy Railway. Also for the extension of a short line to Itacurussa. One of the most important of the recent extensions on the Central is to be a branch to Monte Claros, 37 miles long, and to cost $800,000. Twenty-one miles of the line running north from Lafayette are to be changed to broad gauge in accordance with the general plans for the standardization of the main line of the Central of Brazil running into the State of Minas Geraes from Rio.

The most active railroad construction work being carried on in the north of Brazil is that at present in the hands of the South American Construction Co., in connection with the system in the State of Ceara, known as the North Eastern Railway. Final approval has been given by the Government for the construction by the contractors of a total of about 100 miles of line, comprising 49 miles from M. Calmon to Iquatu, 13 miles for a branch to Cedro and 37 miles for a branch connection between the Sobral and the Baturite Railways. The total appropriation for this work is $2,348,000.

The Mogyana Railway and Navigation Co. has been authorized to build and operate a railway extending from Igarapava, in the State of São Paulo, to Uberaba, State of Minas Geraes, to be incorporated with the Jaguara-Araguary Railway. By the terms of the contract, the line must be concluded and opened to traffic by September 30, 1912.

The definite surveys and estimates for the Araguary-Catalão section of the Goyaz Railway, having a length of 162.191 meters, and of the section between Catalão and Formiga, having a length of 46.800 meters, have been approved.

# CHILE

### THE CABINET OF PRESIDENT BARROS LUCO.

Señor Doctor Ramón Barros Luco, President of the Republic of Chile, has constituted his cabinet as follows:

Minister of the Interior, Señor Doctor Maximiliano Abonos.

Minister of Foreign Affaires, Señor Don Luis Pardo.

Minister of Justice and Public Instruction, Señor Doctor Domingo Amonástegui.

Minister of Finance, Señor Doctor Raymundo del Río.

Minister of War and Navy, Señor General Pinto Concha.

Minister of Industry and Public Works, Señor Doctor Don Ismael Valdez Vergara.

### PAPER FACTORIES.

A French-American syndicate has applied to the Government of Chile for a land grant in the southern part of the Republic, for the establishment of paper factories. It is reported that the company has a capital of $3,000,000 gold.

### AGRICULTURAL AND INDUSTRIAL EXPOSITION.

The International Exposition of Agriculture and National Industries, at Santiago, Chile, in commemoration of the first centenary of independence, was formally opened on November 28, 1910. This

exhibition was held under the auspices of the National Association of Agriculture and Industrial Promotion, with the President of Chile, Señor Doctor RAMÓN BARROS LUCO, as its chairman.

President LUCO delivered an eloquent address, presenting the exposition to the Acting President of the Republic, who received it in behalf of the Government. The Minister of Industries and Public Works, in the name of the Acting President, then declared the exposition opened. The exhibit was a great success, and served to show the remarkable progress attained by Chile in its agricultural and industrial development.

### AEROPLANES FOR THE ARMY.

The Chilean Commission in Europe has been instructed by its Government to commence studies and experiments on the areoplanes of the A. CLEMENT (BAYARD) and other systems, and to submit a report to the Minister of War on the advisability of acquiring such machines for Army purposes.

### INDUSTRIAL STATISTICS FOR 1909.

The Pan American Union has just received the last number of the bulletin of the "*Sociedad de Fomento Fabril*" (Society of Industrial Promotion), of Santiago, which contains the industrial statistics of Chile for 1909. According to this the number of industrial establishments was 5,321, including distilleries, glass, porcelain and pottery factories, navy yards, sawmills, electric-light plants, cotton mills, printing offices, paper factories, tanneries, cigar and cigarette factories, etc.

The capital invested in these industries amounts to about $64,720,753 (United States gold), with an actual production valued at $87,139,981 annually. The domestic raw material consumed totals approximately to $31,234,239, while the foreign material is valued at about $17,351,997 per year.

Employed in these factories are 71,816 persons, distributed as follows: Men, 51,087; women, 17,824; children, 6,905. The annual wages paid aggregate $11,507,178.

### POSTPONEMENT OF AGRICULTURAL CONGRESS.

The Agricultural Congress which was scheduled to have taken place early in the year 1911, at Santiago, Chile, has been postponed until September, 1911.

### THE COPPER INDUSTRY.

From an article written by Señor IGNACIO DÍAZ OSSA, a mining engineer, and published in the "Boletin de la Sociedad Nacional de Minería," of Santiago, Chile, we produce the following paragraphs regarding the production of copper in Chile:

To give an idea of the importance of the copper industry in Chile during the century of its independent life, it will be sufficient to state that in that period the country has yielded over 2,000,000 tons of this metal, representing an approximate value of $400,000,000.

At present the annual production of copper amounts to 46,000 tons, extracted from 500,000 tons of ore; 775 mines contribute to this output, and 100 of them yield more than half of the total production. There are over 15,000 laborers employed in the exploitation of copper in Chile, working about 280 days during the year.

## THE WHEAT CROP IN 1910–11.

The Agricultural Bureau of Statistics and Information of Chile has estimated the wheat crop for the season of 1910–11, in the following manner:

| | Area cultivated in 1910. | Total production. | Rate per hectare |
|---|---|---|---|
| | *Hectares.* | *Quintals.* | *Quintals.* |
| First zone, Atacama to Aconcagua | 27,986.07 | 216,155.41 | 7.72 |
| Second zone, Valparaiso to Talca | 170,782.58 | 2,973,548.87 | 17.41 |
| Third zone, Linares to Concepcion | 172,224.48 | 1,894,735.60 | 11.58 |
| Fourth zone, Arauco to Cautín | 323,926.59 | 3,558,876.41 | 10.99 |
| Fifth zone, Valdivia to Chiloe | 219,208.82 | 1,183,278.00 | 5.42 |
| | 914,128.54 | 9,826,594.29 | 10.76 |

Hectare equivalent to 2.47 acres; quintal equivalent to 220.46 pounds.

## ANALYSIS OF CHILEAN COAL.

According to a report from the United States consul at Valparaiso, the Chilean Government is giving much attention to the development of the coal mines to the end that they shall produce enough to meet the local demands. To date the mines of Chile have not been able to supply one-half of the coal consumed in the country.

The following table gives the analysis of samples of coal as made by the technical department of the government, and published in the "Boletin de la Inspeccion de Jeografia y Minas," Santiago, Chile, for the first quarter of 1910. The samples taken from the mines indicated in the table give a fair idea of the kinds and value of the coal found throughout Chile.

| Items. | Concepcion. | Talcahuano. | Arauco. | Valdivia. |
|---|---|---|---|---|
| Heat produced (Berthelot) | 7692 | 5641 | 7581 | 6068 |
| Coke.....per cent.. | 49.778 | 49.354 | 57.976 | 49.236 |
| Coke, naturally | Fine. | Fine. | Compact. | Fine. |
| Sulphur.....per cent.. | .148 | 2.201 | .005 | .246 |
| Volatile matter.....do.... | 40.368 | 38.375 | 38.718 | 37.297 |
| Solid coal.....do.... | 45.116 | 44.625 | 55.702 | 47.518 |
| Cinders.....do.... | 4.662 | 4.129 | 2.274 | 1.718 |

Another report indicates that a fine quality of coal has been discovered in the Brunswick Peninsula, south of the San Juan River, near Lomas Bay. An analysis of this coal shows the following composition:

| | Per cent. |
|---|---|
| Coal | 76.47 |
| Hydrogen | 7.91 |
| Oxygen | 8.73 |
| Nitrogen | 1.93 |
| Sulphur | .97 |
| Ashes | 3.99 |

## GYMNASTICS IN THE SCHOOLS OF CHILE.

The BULLETIN publishes below extracts from a letter which appeared in the "American Physical Education Review," concerning gymnastics in the public schools of Chile. The information is supplied in a communication from Señor LUATUSZ, of Santiago, Chile, to Dr. C. WARD CRAMPTON, of New York:

All the instruction can be divided into three classes as follows:

First. Primary instruction, composed of all public schools for men and women.

Second. Secondary instruction, composed of the colleges of secondary instruction (university preparatory).

Third. Advanced instruction, composed of all of the established universities.

In the primary schools the Swedish or German system of gymnastics is used twice a week in every course and the classes last 45 minutes. The teachers are generally graduates from the normal schools of the Republic and have had five years' preparation in this work.

In the colleges of secondary instruction for men and women the classes are taught by special teachers, some of whom are college graduates, others normal graduates, a few qualified by military service (one year), and a large number who have had no special preparation.

Since 1905 there has been in the advanced institute of physical education a course to train teachers of gymnastics. This course was once before commenced, but in 1897 was abandoned because of lack of pupils, and even to-day the number of pupils is very small because of the remuneration which they receive.

## MISCELLANEOUS CONSULAR NOTES.

ALFRED A. WINSLOW, the United States Consul at Valparaiso, reports that the Chilean Government is giving its attention to the development of the wood-pulp industry in the wooded sections of Chile, in the vicinity of Temuco, Valdivia, and Puerto Montt. It is said that the forests contain immense quantities of timber well adapted to this industry.

The estimated value of the agricultural products of Chile for 1909 is given as $75,500,000; manufactured products, $98,515,857; the mineral products, $88,200,000; total, $260,215,857.

The wool production for 1909 amounted to 13,072,220 pounds.

The potato crop for 1909 amounted to 6,090,637 bushels, or about 2 bushels per capita.

For the first eleven months of 1910, the customs receipts of Chile amounted to $41,559,076, an increase of over $5,000,000 over the preceding year.

The tanning industry in Chile holds second place in importance. It represents a total investment of $18,700,035, yields an annual production valued at $27,382,300, and furnishes employment to 13,000 persons.

There are 250 publications of various kinds in Chile. "El Mercurio" has the distinction of being the oldest, now in its eighty-third year of existence.

### IMPROVED SERVICE ON WEST COAST.

It is reported here that the Royal Mail Steamship Company, successor to the Pacific Steamship Company, has ordered five new steamers for its South American service. The company plans to further improve its service on the west coast of South America, especially between Valparaiso and Panama, to connect with their line at Colon.

### IMPROVEMENT OF VALDIVIA RIVER.

The Chilean Government has under consideration the improvement of the Valdivia River and the port of Corral at an expense of $3,650,000. It is proposed to dredge the channel of the river to a depth of 23 feet as far up as the city of Valdivia, and provide a harbor at Corral sufficiently large to accommodate 20 war vessels at a time. This section of Chile is developing rapidly, an extensive steel plant having recently been established at Corral.

### HOSPITAL AT VALPARAISO.

Plans are quite well under way and construction work will soon be commenced on a hospital to cost between $40,000 and $50,000, to be erected by the citizens of the United States and Great Britain residing in Valparaiso.

### NEW TRAMWAY LINE IN VALPARAISO.

A syndicate of Valparaiso capitalists has petitioned the local authorities for a franchise to construct an electric railway on the hills back of the city of Valparaiso at an altitude of about 400 feet, and to connect this line with 3 lifts at the brow of the hills, some 200 feet below the line proper. This will require some grades as steep as 16 per cent, and 3 of the lifts will have to be enlarged. There will be from 4 to 5 miles of track together with the necessary electrical installation and rolling stock. The entire road is to be built independent of the present electric lines in the city.

## THE SALTA-MEJILLONES TRANSANDEAN RAILROAD.

Señor EMILIO CARRASCO, the concessionaire of a trans-Andean line which will start from Salta in the Argentine Republic, has selected the port of Mejillones, Chile, as the terminus of the line on the Pacific Ocean.

According to the concessionaire, the selection of Mejillones is due to the unusual advantages which it offers to the shipment of nitrate, particularly that produced in the southern section of the Department of Tocopilla. This zone abounds in nitrate, but the deposits have never been exploited, because of the lack of adequate transportation facilities.

Señor CARRASCO will begin the construction by first building the section between Mejillones and the nitrate zone, in Aguas Blancas and Boquete, so as to expedite exploitation. When the bill granting subsidies to private railroads shall have passed the National Congress, he will then extend the line to Salta.

The concessionaire contemplates, moreover, the construction of a branch line from Mejillones to Antofagasta, connecting the trunk line.

## RAILWAY NOTES.

The Gurapa Tunnel and a section 17 kilometers long, from Cabido, to Pedegua, on the Longitudinal Railroad, was inaugurated during the latter part of November last.

Work has been started on the construction of the northern section, from Chañeral to Lagunas, of the Longitudinal Railway. The distance of this section will be 750 kilometers.

An important section, from Rayado to Papudo, of the Longitudinal Railway, has been opened to traffic.

The Minister of Industries and Public Works has approved the final plans for the construction of a railroad from Cajon to Llaima. The distance to be covered by this line will be 48,140 meters.

## RAILROAD CONSTRUCTION.

The Consul of the United States at Valparaiso, Chile, in an interesting report on railroad construction in the Republic, states that the Chilean Government has outlined extensive public improvements for 1911 covering railroad building, harbor improvements, waterworks, sewer systems, etc. The estimates for new work on the 35 railroads under construction by the Government amount to $10,194,450 United States gold for the year, with $1,080,578 for surveys for new lines, condemning right of way, etc., and $365,000 for new rolling stock to be used on the new lines under construction, to say nothing of the new equipment needed for the old lines.

The above estimates do not cover the work to be done on the Longitudinal and Arica to La Paz Railways that are under special contracts. The former is to be built and operated for a time by English syndicates with headquarters at Santiago before being taken over by the Chilean Government on a guaranty of 5 per cent net on the actual cost of the road and rolling stock.

This line is divided into 2 sections. The northern portion, consisting of 443.6 miles, extending from near Iquique to a point near Chañeral, is being financed by the Chilean Longitudinal Railway Construction Company (Limited) and the Chilean Railway Company (Limited), with offices at Santiago, in charge of W. B. Leane. The construction of this section has been taken over by Macdonald, Gibbs & Macdougall at a cost of $10,900,963, to be completed within 3 years. This firm can be reached at Santiago, Chile, in care of the Chilean Longitudinal Railway Construction Company (Limited). The construction of the southern section, consisting of 310 miles, is being financed by the Howard Syndicate (Limited) with offices at 1263 Calle Compañía, Santiago, Chile. The construction work is being done by Griffiths & Co., for $19,592,529, to be completed within 3 years. This firm can be reached at Santiago, Chile, in care of the Howard Syndicate (Limited). The work on these sections will require 3,500 to 4,000 workmen, of whom 2,000 will be brought from Europe.

# COLOMBIA

## LEGAL TENDER.

The National Assembly of Colombia has recently enacted a law establishing the pound sterling as legal tender in the Republic.

## NEW LOAN.

By a recent law of the National Assembly of Colombia, the President of the Republic is authorized to raise a loan of £300,000, guaranteed by 3 per cent of the customs receipts.

## STEAMSHIP LINE TO PANAMA.

According to reports just received from Colombia, there has been organized in Cauca a company whose purpose it is to establish a steamship line between Tumaco, Buenaventura, and Panama, with a capital of £40,000. The company will inaugurate the line with a 1,000-ton steamer.

## ARTICLES FREE OF DUTY.

By virtue of a recent enactment, the importation of newspaper and printer's ink shall, until further notice, be exempt from customs duties.

The same law provides also for the free importation of denaturalized fertilizers for different uses or industries.

## CALI ELECTRIC-LIGHT SERVICE INSTALLED.

The recent establishment of electric-light service in Cali was celebrated by inaugural ceremonies at the new plant at Piedra Grande (2 miles above Cali on the Cali River), in which participated the Archbishop of Popayan, the Governor of the Department, the foreign consular representatives, the various military, civil, and religious dignitaries, and many hundreds of visitors from Cali and neighboring cities.

In the evening of the same day an even larger gathering assembled at the Plaza Principal of Cali to witness the turning on of the lights for the first time. The square was decorated with artistic arrangements of incandescent bulbs, and the passing of the current, at the appointed time, threw the Plaza and the greater part of the city into a brilliant blaze of light.

The plant consists of a 2,400-volt 125-kilowatt generator, direct-connected to a 250-horsepower turbine which receives water through a 30-inch diameter pipe with a fall of 152 feet from the canal on the mountain side above. Provision for the future has been made by building the plant house, machinery, foundation, and water pipe sufficiently large to permit the installation of a second generator unit of the same capacity as the one now installed. The canal, too, with its equipment of head gate, sand-boxes, reservoir, etc., has been built large enough to supply water power for at least four such units.

This plant has been carried through to a successful completion by a local syndicate, shortly to be incorporated, consisting of Henry J. Eder, Edward H. Mason, Benito Lopez, and Ulpiano Lloreda, at a cost of approximately $100,000. The municipality of Cali has granted to this organization an exclusive concession for electric-light service for a long term of years, and has exempted from customs duties for a period of 10 years all material and equipment necessary for the operation of the plant.

# COSTA RICA

### FREE IMPORTATION OF RAILWAY MATERIALS FOR FARMS.

For the purpose of promoting agriculture and encouraging the development of transportation facilities for the service of rural estates in the Republic, President JIMENEZ, of Costa Rica, has decreed that until December 14, 1912, the importation of rails, metal ties, machinery, and cars, for the construction and operation of such lines, shall be exempt from customs duties.

# CUBA

### INAUGURATION OF THE NATIONAL EXPOSITION.

The National Exposition of Agriculture, Industries, Art, and Women's Fancy Work was formally inaugurated, in Habana, February 4, 1911, in the presence of President GOMEZ, the members of his Cabinet, numerous officials of the Government, and a large crowd.

The exposition is being held in the beautiful grounds and commodious buildings of the Quinta de los Molinos, which have been prepared for the occasion. This is the first official exposition to take place in Cuba, and the products of the soil, mines, stock ranches, industries, arts, and fancy work are the principal features.

### CANALIZATION OF THE ROQUE RIVER.

The President of Cuba has instructed the Secretary of Public Works to call for bids for works on the Roque River to prevent floods. The sum authorized to be spent for this purpose amounts to $1,574,512.67.

### IRRIGATION IN WESTERN CUBA.

The Government of Cuba has taken under consideration the irrigation problem in the western region where the development of agriculture would be materially assisted by this means. Twenty-five thousand dollars have been appropriated for the necessary study and surveys, and a committee of four engineers has been appointed for this work.

The Province of Pinar del Rio, on account of its natural position, would seem to offer the most favorable possibilities for irrigation.

### EXPORTS OF TOBACCO.

During the first half of 1910 the exports of tobacco and its manufactures were as follows:

Leaf tobacco, 14,411,885 pounds, valued at $6,501,430.

Cigars, 83,495,597, valued at $5,649,036.

Cigarettes, 6,194,797 packages, valued at $178,851.

Residue, 2,017,005 pounds, valued at $1,300,715.

Cut tobacco, 185,729 pounds, valued at $72,056.

Summing up, the total value of tobacco exported during the first six months of 1910 was $13,702,088.

### PRODUCTION OF LEAF TOBACCO.

The production of leaf tobacco during the year 1910 amounted to 384,012 bales, as compared with 494,358 bales in 1909.

### NEW RAILWAY DEPOT FOR HAVANA.

The President of the Republic of Cuba has approved the plans and specifications for the construction of a great railway station in Havana, to cost about $3,000,000. In connection with this depot, there is also to be constructed three wharves, at a cost of over $1,000,000.

The building of this large station will be one of the most important improvements in the Cuban capital. The old depot now in use, the "Villanueva Station," is entirely inadequate to meet the requirements of the present heavy traffic of the capital. The railroad company owning the depot has, therefore, proposed to the Government the exchange of the old site with its buildings for the Arsenal grounds. This proposal was accepted by the Government, who will probably construct several public buildings on the Villanueva lands.

### RAILROAD CONCESSIONS.

The Government of Cuba has authorized the Cienfuegos Palmira and Cruces Railway and Power Company to construct and operate a railroad from Caonao to Manicaragua, and a branch line from the former point to Cruces.

The Cuban Railroad Company is soon to begin work on a new road from Manicaragua to Fomento, in Santa Clara Province, which will open up transportation facilities to the cane growers in that country. The franchise for building the road has recently been granted by the Government, and the terms stipulate that the work must begin within two years. It is possible, however, that the road may be opened to traffic within one year.

# DOMINICAN REPUBLIC

## CUBA TO SANTO DOMINGO SERVICE NOT DISCONTINUED.

According to latest information from Cuba, the service of the Sobrinos de Herrera Steamship Company, between Cuba and Santo Domingo, will not be discontinued. The steamship *Julia*, which has been making these trips, will continue in this service, despite the various reports to the contrary.

## REGULATIONS FOR ESTABLISHMENT OF URBAN TELEPHONE SYSTEMS.

At the present time there is no general telephone system in vogue in the Dominican Republic. The Government operates long-distance lines between all cities and towns.

As no provisions had been made by the National Congress for telephone concessions, President Caceres has issued a decree granting concessions to anyone, under certain rules and restrictions, to build and operate urban telephone systems in any and all the cities and towns of the Republic. Special concessions must be obtained for long-distance connections with other cities. The maximum charge for telephone service must not exceed $3 per month. Government officials are to be given gratuitous service. Only one system will be allowed in each city. Construction work must commence within one year from the date of a concession.

Concessions have already been granted for telephone systems in Puerto Plata, Santiago de los Caballeros, and San Francisco de Macoris.

## MARITIME SANITATION.

The Central Board of Health of the Dominican Republic has prohibited the landing in the country of any persons suffering from trachoma or leprosy. It has also ordered that no vessels shall be admitted which have on board a case ot any of the following diseases: Asiatic cholera, plague, yellow fever, exanthematic typhus, smallpox; or such ships as shall have touched at a port infected with any of the above maladies.

## SUPPLY OF FRESH MEATS.

An interesting report from Philip E. Holland, the United States Consul at Puerto Plata, states that very little land is under cultivation in the Dominican Republic, almost the entire acreage being used for grazing. As no meats are exported, the supply of beef and pork is plentiful and the prices are cheap. The best cuts of beef are retailed

at 15 cents a pound, while the less desirable cuts are sold as low as 7 cents. Pork retails at 15 cents a pound.

No grain or dry foodstuffs are fed to the cattle or swine. The cattle fatten well on the native grasses, and are marketed direct from the pastures.

All fresh meats are marketed under municipal supervision. The abattoir, market, and stall privileges are sold annually at public auction to the highest bidders. The sale of these concessions add very materially to the municipal revenue.

## BANANA EXPORTS FROM PUERTO PLATA.

United States Consul PHILIP E. HOLLAND, at Puerto Plata, reports that the banana exports from Puerto Plata for 1910 exceeds that of the previous year by over 50 per cent. A recent estimate indicates that there will be 1,000,000 stems of bananas exported from Puerto Plata in 1911.

The following is a list of shipments, showing the stems and invoice values for the exports of 1908, 1909, and 1910:

| Year. | Stems. | Invoice value. |
|---|---|---|
| 1908 | 631,000 | $312,880 |
| 1909 | 382,000 | 191,000 |
| 1910 | 591,000 | 295,500 |

## DAIRYING IN THE REPUBLIC.

A report from the United States Consul in Puerto Plata, Dominican Republic, states that there is a splendid prospect in this Republic for the general dairy business. At present several dairymen are doing well selling only sweet milk. Some of the dairy farmers have as many as 100 milch cows, and are marketing the entire output in the cities and towns at 25 to 30 cents a gallon. There is practically no expense attached to the production of milk, as the cattle are pastured and not otherwise fed. As soon as the consumer receives the milk it is boiled. The dairymen could turn a share of the milk into butter with profit if they knew how to utilize it. The only way this can be done is by separators. Some of the inland farmers who live too far from the larger centers of population are converting their milk into cheese, which has proved profitable.

## SURVEY ON THE SANTO DOMINGO-CIBAO RAILROAD.

According to the American Minister in Santo Domingo, the preliminary surveys for the proposed railway from the capital of the Dominican Republic to the Cibao district have been commenced. One party of engineers is working north, and another party will soon be started in the south.

# ECUADOR

## ELECTION OF NEW PRESIDENT.

On January 11, 1911, Señor Emilio Estrada was elected President of the Republic of Ecuador. He will be inaugurated on August 10, 1911, succeeding the present incumbent, Gen. Eloy Alfaro.

## RATIFICATION OF SANITARY CONVENTION WITH PANAMA.

On December 16, 1910, the President of the Republic of Ecuador ratified the sanitary convention entered into between the Governments of Ecuador and Panama.

## REGULAR STEAMSHIP SERVICE BETWEEN NEW YORK AND GUAYAQUIL.

A contract has recently been entered into between the Government of Ecuador and the New York Pacific Steamship Company (Limited) of New York, by which a regular monthly service between New York and Guayaquil has been established. The itinerary is to be so arranged that at least one steamer will leave New York each month for this port, the service to be increased and the itinerary to be extended to two or more Ecuadorian ports to the north of Guayaquil. This service is to be known as the Merchants Line.

By the terms of the contract, the company agrees to carry Government officials and employees at reduced rates; to carry free, all official and commercial correspondence and postal packages. The Government, in return, will exempt the steamship company from the payment of all fiscal and municipal taxes, excepting the "patriotic" revenue stamp, of the value of 10 cents silver, which the law requires shall be affixed to bills of lading, shipping receipts, and some other documents.

## MUNICIPAL TAXES ON EXPORTS AND IMPORTS.

The United States Consul General at Guayaquil, Herman R. Dietrich, has recently submitted a report on the municipal taxes of exports and imports, from which we quote the following:

Under the law "regimen municipal," each canton or municipality is permitted to formulate its own tariff of local licenses and taxes, which are independent of and separate from the taxes and duties levied by the Central Government, and which naturally vary to meet the requirements of each locality.

*Guayaquil.*—The municipality receivs a certain proportion of the import and export duties that are collected at the customhouse at this port. A separate municipal tax on imports and exports is not collected as such.

*Manta* (Canton Montecristi).—The agent or consignee of every foreign steamer or sailing vessel, coming from either a national or a foreign port and touching at the port of

Manta, is required to pay a municipal tax of 3 sucres (approximately $1.50 United States currency) per ton weight of cargo landed, excepting ships that bring grain or provisions which are products of the province of Manabi; those that bring salt for account of the Government, articles for public works which the Government shall have declared to be free of municipal taxes, and importations for the municipality (canton) of Montecristi.

*Bahia de Caraquex* (Canton Sucre).—The agents or owners of every ship sailing under a foreign flag that enters the port of Bahia de Caraquez are required to pay a municipal tax of 3 sucres for each ton of cargo delivered, weight or measurement.

The following articles are exempt from the payment of this tax: Live animals, beef, fish, rice, lentils, beans, peas, maize, fruits, cocoa, coffee, hides, and articles imported by the Government.

*Esmeraldas.*—The agents or consignees of all vessels landing cargo at Esmeraldas, whether coming from a foreign port or a port of another province of the Republic, are required to pay a municipal tax of 20 centavos (about 10 cents) on each 46 kilograms (equals 101.2 pounds) of cargo landed. Provisions are exempt from this tax. Silks, fancy goods, and articles of luxury pay 30 centavos (15 cents) on each 46 kilograms. Bulky articles pay 5 centavos (2½ cents) per cubic foot.

*Puerto Bolivar* (Canton Machala).—Reported to be the same as at Manta and Bahia de Caraquez, viz, 3 sucres per ton.

The taxes are collected by the municipal treasurer, from the agents or consignees of the vessels. The question of the weight or measurement of the cargo upon which they are collected is determined by the bills of lading and the customhouse papers.

The third paragraph of article 113 of the customs law of Ecuador of January 1, 1905, provides for a general tax of "*medio centavo*" (one-half cent silver) per kilogram (2.2 pounds). This is to be collected at all of the customs ports of the Republic and credited to the respective municipalities and is understood to apply only to exports.

# GUATEMALA

## THE THIRD CENTRAL AMERICAN CONFERENCE.

On January 1, 1911, there convened the Third Central American Conference to discuss economic subjects and matters of mutual interest to the five Central American Republics.

The Minister of Foreign Relations of Guatemala presided over the opening session, and delivered a speech in calling the conference to order. Señor Carlos de Lara, delegate from Costa Rica, replied in behalf of the delegates.

Señor José Pinto, representative from Guatemala, and Señor Carlos de Lara, from Costa Rica, were elected, respectively, president and secretary of the conference.

## EXPORTS OF COFFEE.

During the last crop season, from November, 1909, to October 31, 1910, the exports of coffee were as follows: 93,696 sacks through the port of San Jose; 93,385 sacks through the port of Champerico; and 182,378 sacks through the port of Puerto Barrios. This made a total of 369,459 sacks, of which 255,313 were clean coffee and 114,146 coffee in the parchment.

### METEOROLOGICAL OBSERVATIONS FOR 1910.

The following observations have been recorded during the year 1910 for the Republic of Guatemala.

| | Fahrenheit. | Centigrade. | Date. |
|---|---|---|---|
| Mean temperature | 67.0 | 19.4 | |
| Coldest day | 58.6 | 14.7 | December 3. |
| Warmest day | 73.6 | 23.1 | April 5. |
| Coldest month | 63.5 | 17.5 | January. |
| Warmest month | 69.5 | 20.8 | May. |

During the year it rained on 132 days; the rainiest months were June and September. Guatemala has an elevation of 4,877 feet.

## HAITI

### CABINET CHANGES.

The following changes in the Haitian cabinet have been announced: Gen. SEPTIMUS MARIUS, Secretary of Finance and Commerce, has been reappointed Secretary of War and Navy; Gen. J. MAGNAN, Extraordinary Delegate of the Government in the Department of the South, has been appointed Secretary of Public Works and Agriculture, to succeed MURAT CLAUDE, who assumes the portfolio of the Department of Finance and Commerce.

### CHANGES IN BUDGET FOR FISCAL YEAR 1910–11.

A late number of the "Moniteur," the official journal of Haiti, indicates that the Bureau of Archives of the Senate has issued some corrections to the proposed budget as previously published. The corrected budget now stands as follows:

The total expenditures are fixed at 7,717,799.55 gourdes ($3,279,858.78 American gold), distributed among the different branches of the administration as follows:

| | American gold. | Haitian money. |
|---|---|---|
| | *Dollars.* | *Gourdes.* |
| Foreign relations | 134,701.34 | 19,780.00 |
| Worship | 79,650.00 | 47,800.00 |
| Justice | 7,100.69 | 633,114.00 |
| War | 58,000.00 | 1,390,583.51 |
| Navy | 25,000.00 | 321,303.00 |
| Bank service | 30,000.00 | 10,000.00 |
| Agriculture | 6,970.00 | 292,928.00 |
| Public instruction | 21,896.00 | 1,354,878.00 |
| Finance and commerce | 46,322.56 | 1,105,329.96 |
| Receipts and expenditures | 3,500.00 | 124,932.00 |
| Interior and general police | 303,700.00 | 1,647,561.56 |
| Public debt | 2,517,901.68 | 206,481.52 |
| Public works | 45,117.20 | 563,108.00 |
| Total | 3,279,858.78 | 7,717,799.55 |

## NEW TEMPORARY LOAN.

The Haitian Government has contracted with a banking firm of New York City for a loan of $600,000, at an annual interest of 5 per cent. The loan is guaranteed by two-fifths of the two import surtaxes of 25 per cent each, to be collected by the Banque Nationale, and placed to the credit of the negotiating bank. Redemption of this loan is to be made on the issuance of the big foreign loan, or within two years at the latest, in case the former is not negotiated.

## PARCELS POST CONVENTION BETWEEN THE UNITED STATES AND HAITI.

On October 3, 1910, President SIMON ratified the convention relating to the exchange of postal parcels between the United States and Haiti, signed August 26, 1910, at Port au Prince, by the Government of the Republic of Haiti and the Government of the United States of America, represented, respectively, by Mr. SEPTIMUS MARIUS, Secretary of War and Navy, charged with the Departments of Finance and Commerce, Mr. PÉTION PIERRE-ANDRÉ, Minister of Foreign Affairs, and Mr. HENRY W. FURNISS, Envoy Extraordinary and Minister Plenipotentiary of the United States of America at Port au Prince. On October 27 Congress sanctioned the convention which was promulgated by the President of Haiti November 7, 1910. This convention only awaits the ratification of the President and Congress of the United States to become effective in both countries.

The text of the convention reads as follows:

For the purpose of making better postal arrangements between the United States of America and the Republic of Haiti, the undersigned, HENRY W. FURNISS, Envoy Extraordinary and Minister Plenipotentiary of the United States of America, acting for and in the name of FRANK HARRIS HITCHCOCK as Postmaster General of the United States of America, on behalf of the United States of America; Mr. P. PIERRE-ANDRÉ, Minister of Foreign Office, and SEPTIMUS MARIUS, Haitian Secretary of War and Navy, charged with the Departments of Finance and Commerce, on behalf of the Republic of Haiti, by virtue of the authority vested in them, have agreed upon the following articles for the establishment of a parcels post system of exchange between the two countries.

ARTICLE I.

The provisions of this convention relate only to parcels of mail matter to be exchanged by the system herein provided for, and do not affect the arrangements now existing under the Universal Postal Convention, which will continue as heretofore; all the agreements hereinafter contained apply exclusively to mails exchanged under these articles.

ARTICLE II.

(1) There shall be admitted to the mails exchanged under this convention, articles of merchandise and mail matter, except letters, post cards, and written matter of all kinds that are admitted under any conditions to the domestic mails of the country of origin, except that no parcel may exceed 11 pounds (or 5 kilogrammes) in weight, nor the following dimensions: Greatest length in any direction, 3 feet 6 inches; greatest length and girth combined, 6 feet; and must be so wrapped or inclosed as to permit

their contents to be easily examined by postmasters and customs officers, and except that the following articles and such other articles as may be mutually agreed upon between the two countries are prohibited admission to the mails exchanged under this convention.

Publications which violate the copyright laws of the country of destination; poisons and explosives or inflammable substances; fatty substances, liquids, and those which easily liquefy; confections and pastes; live or dead animals, except dead insects and reptiles when thoroughly dried; fruits and vegetables which easily decompose and substances which exhale a bad odor; lottery tickets, lottery advertisements, or lottery circulars; all obscene or immoral articles; articles which may in any way damage or destroy the mails or injure the persons handling them.

(2) All admissible articles of merchandise mailed in one country for the other, or received in one country from the other, shall be free from any detention or inspection whatever, except such as is required for collection of customs duties; and shall be forwarded by the most speedy means to their destination, being subject in their transmission to the laws and regulations of each country respectively.

ARTICLE III.

(1) A letter or communication of the nature of personal correspondence must not accompany, be written on, or inclosed with any parcel.

(2) If such be found, the letter will be placed in the mails, if separable, and if the communication be inseparably attached, the whole package will be rejected. If, however, any such should inadvertently be forwarded, the country of destination will collect on the letter or letters double rates of postage according to the Universal Postal Convention.

(3) No parcel may contain packages intended for delivery at any address other than that borne by the parcel itself. If such inclosed packages be detected they must be sent forward singly charged with new and distinct parcels-post rates.

ARTICLE IV.

(1) The following rates of postage shall in all cases be required to be fully prepaid with postage stamps of the country of origin, viz:

(2) In the United States, for a parcel not exceeding 1 pound in weight, 12 cents; and for each additional pound or fraction of a pound, 12 cents.

(3) In Haiti, for a parcel not exceeding 1 pound metric (one-half a kilogramme) in weight, 12 cents (American gold); and for each additional pound or fraction of a pound, 12 cents (American gold).

(4) The parcels shall be promptly delivered to addressees at the post offices of address in the country of destination, free of charge for postage; but the country of destination may, at its option, levy and collect from the addressee for interior service and delivery a charge, the amount of which is to be fixed according to its own regulations, but which shall in no case exceed 5 cents in the United States or 5 cents (American gold) in Haiti for each parcel, whatever its weight.

ARTICLE V.

(1) The sender will, at the time of mailing the package, receive a certificate of mailing from the post office where the package is mailed, on a form like Form 1, annexed hereto.

(2) The sender of a package may have the same registered in accordance with the regulations of the country of origin.

(3) An acknowledgment of the delivery of a registered article shall be returned to the sender when requested; but either country may require of the sender a prepayment of a fee therefor not exceeding 5 cents in the United States or 5 cents (American gold) in Haiti.

(4) The addressees of registered articles shall be advised of the arrival of a package addressed to them by a notice from the post office at destination.

ARTICLE VI.

(1) The sender of each parcel shall make a customs declaration, pasted upon or attached to the package, upon a special form provided for the purpose (see Form 2 annexed hereto), giving a general description of the parcel, an accurate statement of its contents and value, date of mailing, and the sender's signature and place of residence and place of address.

(2) The parcel in question shall be subject in the country of destination to all customs duties and all customs regulations in force in that country for the protection of its customs revenues; and the customs duties properly chargeable thereon shall be collected on delivery, in accordance with the customs regulations of the country of destination.

ARTICLE VII.

Each country shall retain to its own use the whole of the postages, registration, and delivery fees it collects on said parcels; consequently, this convention will give rise to no separate accounts between the two countries.

ARTICLE VIII.

(1) The parcels shall be considered as a component part of the mails exchanged direct between the United States and Haiti, to be dispatched to destination by the country of origin at its cost and by such means as it provides; but must be forwarded, at the option of the dispatching office, either in boxes prepared expressly for the purpose or in ordinary mail sacks marked "parcels post," "colis postaux," and securely sealed with wax, or otherwise, as may be mutually provided by the regulations hereunder.

(2) Each country shall promptly return empty to dispatching office by next mail, all such bags and boxes, unless some other arrangement shall be mutually agreed to.

(3) Although articles admitted under this convention will be transmitted as aforesaid between the exchange offices, they should be so carefully packed as to be safely transmitted in the open mails of either country, both in going to the exchange office in the country of origin and to the office of address in the country of destination.

(4) Each dispatch of a parcels-post mail must be accompanied by a descriptive list, in duplicate, of all the parcels sent, showing distinctly the list number of each parcel, the name of the sender, the name of the addressee and his address, and the declared contents and value; and must be inclosed in one of the boxes or sacks of such dispatch (see Form 3 annexed hereto).

ARTICLE IX.

The stipulations of this convention apply exclusively to the mails herein provided for and to be exchanged between the office of New York and such offices within the United States as may be designated hereafter by the Postmaster General of the United States, and the office of Port au Prince, and such other offices in Haiti as may be designated hereafter by the Haitian Secretary of Finance and Commerce.

ARTICLE X.

(1) As soon as the mail shall have reached the office of destination, that office shall check the contents of the mail.

(2) In the event of the parcel bill not having been received a substitute should be at once prepared.

(3) Any errors in the entries on the parcel bill which may be discovered should, after verification by a second officer, be corrected and noted for report to the dispatching office on a form "verification certificate," which should be sent in a special envelope.

(4) If a parcel advised on the bill be not received, after the nonreceipt has been verified by a second officer, the entry on the bill should be canceled and tha fact reported at once.

(5) If a parcel be observed to be insufficiently prepaid, it must not be taxed with deficient postage, but the circumstance must be reported on the verification certificate form.

(6) Should a parcel be received in a damaged or imperfect condition, full particulars should be reported on the same form.

(7) If no verification certificate or note of error be received, a parcel mail shall be considered as duly delivered, having been found on examination correct in all respects.

ARTICLE XI.

(1) If a parcel can not be delivered as addressed, or is refused it must be returned, without charge, directly to the dispatching office of exchange, at the expiration of thirty days from its receipt at the office of destination; and the country of origin may collect from the sender for the return of the parcel a sum equal to the postage when first mailed; provided, however, that parcels prohibited by Article II and those which do not conform to the conditions as to size, weight, and value, prescribed by said article, shall not necessarily be returned to the country of origin, but may be disposed of, without recourse, in accordance with the customs laws and regulations of the country of destination.

(2) When the contents of a parcel which can not be delivered are liable to deterioration or corruption, they may be destroyed at once, if necessary, or if expedient, sold, without previous notice or judicial formality, for the benefit of the right person; the particulars of each sale being noticed by one post office to the other.

(3) An order for redirection or reforwarding must be accompanied by the amount due for postage necessary for the return of the article to the office of origin, at the ordinary parcel rates.

ARTICLE XII.

The Post Office Department of either of the contracting countries will not be responsible for the loss or damage of any parcel, and no indemnity can consequently be claimed by the sender or addressee in either country.

ARTICLE XIII.

The Postmaster of the United States of America and the Secretary of Finance and Commerce of Haiti shall have authority to jointly make such further regulations of order and detail as may be found necessary to carry out the present convention from time to time; and may, by agreement prescribe conditions for the admission to mails of any of the articles prohibited by Article II of this convention.

ARTICLE XIV.

This convention shall be ratified by the contracting countries in accordance with their respective laws, and the notifications shall be exchanged in the city of Port-au-Prince as soon as possible.

It shall take effect and operations thereunder shall begin upon the date of the exchange of said ratifications; and shall continue in force until terminated by mutual agreement, but may be annulled at the desire of either party upon six months' previous notice given by one or the other.

Done in duplicate and signed at Port-au-Prince the 26th day of the month of August, 1910.

H. W. FURNISS, *American Minister.*

## NEW LINE FOR COASTWISE NAVIGATION.

An important concession was granted by the Haitian Government on December 6, 1910, to Mr. Hans Rankl, for the exclusive privilege of establishing a coastwise line of steamers plying between the different ports of that country. This new maritime service will have an important bearing on the development of Haitian commerce and industry. The concession has been awarded for a period of 25 years with provisions for renewal on expiration.

By the terms of the arrangement, the concessionaire must place into the service, at its inauguration, three new steamers having a capacity of at least 350 tons each, and a minimum speed of 10 knots per hour. These are to make one round trip per week. The service will consist of two divisions, a northern and a southern line. The steamers of the northern line will call at the cities of Archaie, St. Marc, Grande-Saline, Gonaïves, Môle St. Nicolas, Port de Paix, Cap-Haïtien, Caracol, Fort Liberté, Borgne, Port Margot, Jean-Rabel, Anse-à-Foleur and St. Louis of the North. The steamers of the southern line will make entry at Léogane, Grand-Goâve, Miragoâne, Anse-à-Veau, Jérémie, Dame-Marie, Anse d'Hainaut, Les Anglais, Chardonnières, Port-à-Piment, Côteaux, Roche-à-Bateaux, Cayes, Les Abricots, Aquin, Jacmel, Petit-Trou de Nippes, Grand-Boucan du Sud, Petite-Rivière-de-Nippes, Damassin et Saltrou. The steamers may also stop at any other ports.

In return the concessionaire is to receive a subsidy of $12,000 per year during the first 10 years of the contract, commencing with the fiscal year 1911–12.

## COMPULSORY PRIMARY EDUCATION.

The context of the law governing compulsory primary education appears in the "Moniteur," of Haiti, issues of November 2 and 5, 1910.

## BELGO-HAITIAN CHAMBER OF COMMERCE.

A recent number of "Le Nouvelliste," of Haiti, states that an association has been organized in Brussels under the name of Belgo-Haitian Chamber of Commerce for the purpose of studying and considering methods for the development of Belgian economic interests in Haiti, and, reciprocally, Haitian interests in Belgium.

This Chamber of Commerce owes its organization to the initiative of Mr. Henri Jones, the Haitian Consul General at Antwerp.

## DEVELOPMENT AND OPPORTUNITIES IN HAITI.

The Pan American Union is greatly indebted to Hon. Henry W. Furniss, the United States Minister at Port-au-Prince, Haiti, for the

following articles on the recent electric light installations in Haiti, and on the possibilities existing in the copper deposits of that country:

### ELECTRIC LIGHT IN HAITI.

For the first time in their history the cities of Port-au-Prince and Cape Haitien were lit by electric light a few weeks ago. For some years prior to this the streets have been without illumination.

The electric lighting of the two cities was authorized by a contract made with the Haitien Government in 1906, but it was not until about a year ago, when an American formed a company which took over the contract, that any steps were taken to carry it out.

The contract runs for 40 years and grants an exclusive monopoly for light and power by electricity for the cities of Port-au-Prince and Cape Haitien.

By the terms of the contract the Haitien Government agrees to pay 75 cents gold per night for each 1,000 candlepower arc light and authorized the use of 200 such lights at Port-au-Prince and 150 at Cape Haitien for street illumination, besides providing for a large number of incandescent lights for Government offices, etc.

As guarantee for the payment of the services mentioned the Government sets aside the tonnage dues of Port-au-Prince and Cape Haitien which are ample for the purpose.

The Cape Haitien plant is a modern direct-current system with double installation for emergency. It consists of two direct connected 125-kilowatt units and two 150-horsepower boilers. The lights are suspended from tasteful iron poles.

The Port-au-Prince plant is not entirely completed, due to inability to arrange for prompt delivery of material ordered. When completed it will consist of one 200-kilowatt and one 150-kilowatt direct-connected units, alternating currents. The dynamo station is located about 2 miles from the city limits and is situated on the bay and has its own deep water wharf and a mountain stream furnishing ample supply of fresh water. The current generated is 2,300 volts and it is transformed and distributed at a station on the edge of the city limits. All of the machinery, wire, lamps, most of the posts, etc., cement for building, and coal for fuel, are of United States origin.

### COPPER DEPOSITS IN HAITI.

Copper ore, as carbonate or sulphide, occurs in outcrops in numerous sections of Haiti in three forms—as contact metamorphic deposits, as veins in quartz porphyry, or impregnation in altered limestone. In some localities these three formations occur in close proximity. In most places silver and gold in small percentage, but sufficient to be a paying admixture, occur with the copper.

Large deposits of copper ore have been observed in three sections of Haiti, viz, in the vicinity of Grande Rivière, St. Michel, and Terre Neuve, all to the north of Port-au-Prince.

The deposit near Grande Rivière has only been superficially prospected. A few pits were dug and from the ore removed samples were taken and sent to the United States for assay. The assay showed copper in paying percentage. The quality of the ore in sight certainly warrants investigation as to the extent of the deposit. However, prospecting has not been continued, doubtless because of the difficulties of transportation to be confronted under present conditions.

Grande Rivière is about 15 miles from Cape Haitien, a port open to foreign navigation, with which it is connected by a railroad which has been allowed to run down, but is soon to be reconstructed by an American company. In fact, this railroad is to be extended to Port-au-Prince, necessitating its passing in close proximity to the copper deposit which will then most likely be developed.

The deposit of copper which occurs in St. Michel was known to the Spanish soon after Columbus discovered the Island of Haiti. The old shafts, tunnels, and galleries made by the early Spanish are still in existence, but seem to show that the mining was not for the copper but for the gold and silver found in contact with it. Three or four years ago there was considerable prospecting in this section with a view to ascertaining the extent and richness of the deposit. The enigneers expressed themselves satisfied that the deposit was vast and the samples assayed in the United States gave satisfactory results as to percentage of copper. The difficulty is that the region is remote from a seaport and would necessitate transportation of the ore by pack mules, which, under the circumstances, would be rather expensive, eating up, as it would, all the profits of the mining. The projected railroad from Port au Prince to Cape Haitian will pass near this section, and as the copper deposits are controlled by those interested in the railroad, a spur track will put be in; then there should be no reason why mining the ore on a large scale would not be a paying proposition.

The only copper deposits which are now being prospected and worked are in what is known as the Terre Neuve district. Terre Neuve is a village, and in its vicinity are numerous copper deposits varying in formation, accessibility, and productiveness. An intelligent, progressive Haitian has the mining concession for this section. He has associated with him a group of Americans and Germans, who have furnished the money for prospecting and developing the property. Sufficient ore has now been uncovered so that the proposition has gone beyond the stage of mere prospecting. There is now intention to seek capital in the United States with which to carry on mining operations.

The largest and best of the deposits in the Terre Neuve concessions, and at the same time the most accessible, is known as Roche Glissé mine, situated in a section called Mémé, which is about 12 miles from Gonaives, a seaport. The road from the mine to Gonaives is for the most part over a level plain, only the 2 miles nearest the mine presenting any difficulties, and that portion is along a gradual slope of the hill. The ore, therefore, can be transferred easily by pack mules or carts.

The deposit at Roche Glassé occupies the core of a large hill which is capped by a layer of magnetite. The hill backs up against a high limestone cliff. The layer of magnetite is from 15 to 20 feet thick. Mining the copper ore is here carried on by the quarrying method. The magnetite is blasted down, exposing the copper ore, which is in turn blasted down. Two large terraces have already been made, during the construction of which about a thousand tons of ore, bearing from 4 to 15 per cent of copper, with an admixture of silver and gold, has been removed and is ready for shipment. The ore of this mine is a sulphide, decomposed in places to a carbonate deposited in a highly salicified limestone. A recent shipment of the better quality ore averaged 14.8 per cent copper, 3.34 ounces of silver, and 0.18 ounce of gold per ton.

A core drill at Roche Glissé has proven that the ore extends over a large area of considerable depth and that the quality is good, but drilling has not been carried on long enough to permit mapping out the deposit and estimating the ore body.

About 10 miles distant from Roche Glassé is the Bresillas mine. This mine is not so favorably located as the other one, in that it is farther in the interior and transportation to the seaport is more difficult because of the two divides to be crossed. The ore here occurs as a contact metamorphic deposit and is a sulphide averaging from 5 to 12 per cent copper. Mining is here carried on by tunnels entering the very steep side of the hill at an altitude of about 2,500 feet. At present at this mine a couple of hundred tons of copper ore await shipment and a much larger quantity of magnetite.

There are numerous other copper properties in this section where the outcroppings warrant further prospecting. On some of them there has been a little tunnelling and a few shafts have been sunk, but no systematic prospecting has been done.

The per cent of copper found in the mines and deposits mentioned might not at first appeal to those interested in copper mining as sufficient for investment, but

when it is taken into account that the equivalent in gold to the sum paid in Haiti for labor is so small as compared with miners' salaries in the United States, it becomes apparent that it is possible to work at a profit lower grade ores here than there. Granting that it is true that in the Tropics the efficiency of the laborer does not compare favorably with that of the United States laborer, yet with an average of 20 cents gold per day for a Haitian laborer, one can employ a number of laborers who more than make up for the difference, while it is to be remembered that in a recent report of the Panama Canal Commission it was stated that the laborers from Haiti and Martinique excelled all others on like work.

# HONDURAS

### REVENUES AND EXPENDITURES, 1909-10.

According to figures received from the Government of Honduras, the revenues and expenditures during the fiscal year 1909–10 were as follows: Revenues, 7,925,964.26 pesos; expenses, 7,800,658.04 pesos; surplus, 125,306.22 pesos. The peso has a value of approximately 39 cents United States gold.

### CONVENTION WITH THE UNITED STATES.

Hon. PHILANDER C. KNOX, Secretary of State of the United States, and Gen. JUAN E. PAREDES, Minister of Finance and Envoy Extraordinary of Honduras on Special Mission, signed on January 10, 1911, a convention providing for the conversion of the foreign debt of Honduras. Under this convention, the Republic will possibly enter into a contract with the firm of J. P. MORGAN & Co., of New York, for a loan of $10,000,000.

### NEW STEAMER SERVICE.

The United States consul at Puerto Cortes reports that announcement has been made of the early inauguration of new steamship service between Puerto Cortes, Honduras, and Galveston, Tex., with stops en route at Belize, British Honduras, and Livingston, Guatemala. The first ship is scheduled to leave Galveston the first week in January, and weekly service will be maintained thereafter. A charter has been signed for the steamship *Viator*, which has been operated by another company between this port and New Orleans.

The new line is established by the Galveston & Central American Banana & Steamship Co., of Texas, with principal offices in Galveston. The principal aim is to build up direct trade relations between Texas points and Central America. The company will also engage in the banana trade, contracts having been signed with banana growers for the delivery of approximately 1,000,000 bunches in 1911. These contracts are unique in that the price to be paid the grower

fluctuates with the demand for fruit in the United States. The average price has been nearly 20 cents gold per bunch delivered alongside the railroad. The Galveston company will pay a maximum of 38 cents in April and May and a minimum of 14 cents during January, July, August, and December. The yearly average is slightly above the current price.

With this new means of rapid communication and transportation between the producer and consumer, the cultivation of bananas in this district will take on new life, because the grower will have a brighter prospect of success.

## TRADE NOTES.

ARMINIUS T. HAEBERLE, United States consul at Tegucigalpa, reports that there appears to be an opportunity for the development of a trade in musical instruments and supplies in his district.

## MINING POSSIBILITIES IN HONDURAS.

The BULLETIN is in receipt of a most interesting report, made by a prominent civil and mining engineer of Honduras, and submitted to CLAUDE I. DAWSON, the United States Consul at Puerto Cortes, Honduras. The following extracts are quoted from this report:

I have the honor to report the following as the results of my recent visit to and inspection of the gold-bearing district located around the town of Macuelizo, in the Department of Santa Barbara.

The result has been to confirm my ideas as to the great value of this region which should before long be widely known, and its development and exploitation undertaken with the intelligence and activity usual to the gold seekers and mining companies of the United States. It has all the surface indications of one of the great gold mining camps of the world.

This mineral belt is situated between longitude 88° 15′ and 88° 45′ west from Greenwich, and latitude 15° 20′ to 15° 40′ north, being one-half degree or some 35 miles long by one-third degree or some 25 miles wide, with a general northeast and southwest course. Its length (with this width) most probably extends some 25 miles further south and west into the Republic of Guatemala, as very rich and extensive placers are now being worked there, but I was unable to visit that portion of the field.

In the district inspected—that in Honduras—the placers or banks of gold-bearing gravel are nearly continuous, but of varying depth and richness. In going through the district a stop was made and two of the gravel beds examined in detail—the first, about 60 acres in extent, showing an average depth of 30 feet with a value of 65 cents per cubic yard (approximately 1 ton); and the whole 250 acres in sight was said to be about the same. The other had a less depth—from 2 to 20 feet, averaging about 4 feet—and carried 90 cents per cubic yard, with some parts (perhaps one-fourth) entirely barren, except in the bottoms of the small gulches running through it. A few places were found a little richer, up to $1.10 per cubic yard. On this ground many shallow veins of soft, partially decomposed iron-stained (oxides) quartz were seen crossing the hills northeast and southwest, mostly very narrow, from 2 to 12 inches in width, carrying gold values from $40 to $60 per ton.

Water for all purposes of washing and milling is abundant, small clear running streams everywhere at hand, with sufficient fall for water power and hydraulic purposes.

Very many large veins of white quartz are found in all parts of the district, many showing a little gold in the pan or horn spoon, with occasional streaks of decomposed iron quartz showing specks of gold to the naked eye. Their general course is northeast and southwest. They are strong and bold, outcrop on the surface, and the whole region is covered with loose or wash quartz bowlders, broken off from these ledges, and varying in size from an ounce to a ton.

The region is almost virgin—unknown and unoccupied. Only a few, not more than a dozen, individuals and small companies being at work throughout the entire district.

Considerable gulch gold is worked out by the natives in hand *bateas* or small boxes and wooden pans. The local merchants estimate the gathering at some $1,000 gold per month. They exhibited small quantities of gold dust with nuggets from one pennyweight to one ounce. This gold is sent to the United States in exchange for merchandise and is exceptionally pure, running about $18.50 per ounce in gold coin at the mints.

The country rock is mainly micaceous schist with granite predominating, and all heavily charged with sulphides of iron (pyrites). Some gneiss rock, some diorite and dolerite were also seen, and occasional dykes and overflows of porphyry, intermixed with other combinations of igneous and metamorphic rocks. Sienite is also present in limited quantities, and a strong and persistent ledge of limestone is said to run almost entirely across the tract. Occasional indications of dolomite and some detached bowlders of slaty old blue silurian limestone were found in the eastern part.

The district needs a railroad and can not be properly worked without one. When a railroad is built, and I understand one is projected, the district should support a population of 50,000 mixed workers and purveyors in comfortable activity, with a good market for all kinds of United States goods, products, and manufactures.

The locality is now reached by steamer from New Orleans, Mobile, or Galveston to Puerto Cortes, thence 40 miles south by railroad to Chamelicon, and thence 60 miles west by horse or mule back.

### THE AGALTECA IRON MINE.

A report from Mr. ARMINIUS T. HAEBERLE, the United States Consul at Tegucigalpa, indicates that a thorough examination is to be made of the iron mine at Agalteca which covers an area of several miles, and is reported to contain over 100,000,000 tons of high-grade ore. A resident of Honduras holds a concession for the working of this mine. Should the results bear out the present indications of the wealth of the mine, it is probable that a railroad to the interior of Honduras will be built to facilitate operations there.

## MEXICO

### THE CENSUS OF 1910.

The Bureau of Statistics of the Republic of Mexico has just announced the results of the census taken in October, 1910. The accompanying table shows an increase in the population, during the

last decade, of 1,455,948. This number represents a gain of over 10 per cent in the population of 1900, which totaled 13,607,259.

| States. | 1900 | 1910 | Increase. |
|---|---|---|---|
| Aguascalientes | 102,416 | 118,978 | 16,562 |
| Campeche | 86,542 | 85,795 | [a] 747 |
| Coahuila | 296,938 | 367,652 | 70,714 |
| Colima | 65,115 | 77,704 | 12,589 |
| Chiapas | 360,799 | 436,817 | 76,018 |
| Chihuahua | 327,784 | 405,265 | 77,481 |
| Distrito Federal | 541,516 | 719,052 | 177,536 |
| Durango | 370,294 | 436,147 | 65,853 |
| Guanajuato | 1,061,724 | 1,075,270 | 13,548 |
| Guerrero | 479,205 | 605,437 | 126,232 |
| Hidalgo | 605,051 | 641,895 | 36,844 |
| Jalisco | 1,153,891 | 1,202,802 | 48,911 |
| Mexico | 934,463 | 975,019 | 40,556 |
| Michoacan | 935,808 | 991,649 | 55,841 |
| Morelos | 160,115 | 179,814 | 19,699 |
| Nuevo Leon | 327,937 | 368,929 | 40,992 |
| Oaxaca | 948,633 | 1,041,035 | 92,402 |
| Puebla | 1,021,133 | 1,092,456 | 71,323 |
| Queretaro | 232,389 | 243,515 | 11,126 |
| San Luis Potosi | 575,432 | 624,748 | 49,316 |
| Sinaloa | 296,701 | 323,499 | 26,798 |
| Sonora | 221,682 | 262,545 | 40,863 |
| Tabasco | 159,834 | 183,708 | 23,874 |
| Tamaulipas | 218,948 | 249,253 | 30,305 |
| Tlaxcala | 172,315 | 183,805 | 11,490 |
| Veracruz | 981,030 | 1,124,368 | 143,338 |
| Yucatan | 309,652 | 337,020 | 27,368 |
| Zacatecas | 462,190 | 475,863 | 13,673 |
| Baja California (northern district) | 7,583 | 9,905 | 2,322 |
| Baja California (southern district) | 40,041 | 42,339 | 2,298 |
| Tepic | 150,098 | 171,337 | 21,739 |
| Quintana Roo | ..... | 9,086 | 9,086 |
| Total | 13,607,259 | 15,063,207 | 1,455,948 |

[a] Decrease.

## THE PROPOSED BUDGET FOR 1911–12.

The Department of Finance of Mexico has submitted to the House of Deputies the proposed budget for the fiscal year 1911–12, and the accounts for 1909–10.

The budget, as proposed for the coming year, is constituted as follows:

| | |
|---|---|
| Estimated ordinary revenues | [a] $51,828,500.00 |
| Estimated ordinary expenditures | 51,801,200.73 |
| Estimated surplus | 27,299.27 |

The accounts for the fiscal year 1909–10 show the ordinary receipts and expenditures for that period to be:

| | |
|---|---|
| Receipts | [a] $53,164,242.55 |
| Expenditures | 47,514,325.28 |
| Surplus | 5,649,917.27 |

The revenues for 1909–10, as compared with those for 1908–9, show an increase of about $3,776,487.15. This increase is still greater, if it be remembered that during the year 1908–9 there was

[a] United States currency.

deposited into the Treasury, as an extraordinary revenue, the sum realized from the conversion of the shares of the National Railroad owned by the Government, and amounting to approximately $1,003,210.

The total surplus of revenues over expenditures during the past 15 years has reached the sum of $73,500,000. Of this amount there has been expended for public works and improvements $37,000,000, or a little over 50 per cent. The balance constitutes the Treasury reserve fund.

It is interesting to note that during the 15 years in question, 1895–96 to 1909–10, the expenditures have increased from $22,500,000 to $47,500,000. However, while the expenses have more than doubled during this period, the revenues have increased in still greater proportion, establishing an unusual record.

This increase in revenues is even more remarkable when it is recalled that since the beginning of the "surplus era" several forms of taxation have been abolished, and still others reduced. It is, therefore, quite evident that the increase is due entirely to the economic progress of the country and the sound financial management of its finances.

### RATIFICATION OF CHAMIZAL ARBITRATION TREATY.

The ratifications of the convention between the United States and Mexico, submitting to arbitration the Chamizal zone, were exchanged at Washington on January 25, 1911. The arbitration commission is constituted as follows: Hon. Eugene Lafe Lafeur, of Montreal, Canada, referee; Hon. Anson Mills, member for the United States, and Hon. Fernando Beltrán y Puga, member for Mexico.

### DEVELOPMENT IN CHIAPAS.

A distinguished economist and banker of Chiapas, Señor Don Romulo Farrera, has furnished these notes on the progress of Chiapas. They are of particular interest coming from one personally acquainted with conditions and hence eminently fitted to describe them.

The State of Chiapas, which by reason of its remoteness and want of arteries of communication hitherto has been almost ignored, has attracted considerable attention since the opening of the Pan American Railway. Some have predicted that the Pan American Railway would be a failure, but notwithstanding the fact that it is limited to the coast line between the Sierra Madre and the Pacific, it is increasing its movement daily, and the traffic on this road has grown 70 per cent since it was opened. The land on the road, too, has increased fourfold in value, india-rubber plantations have been established on a large scale, and the lumber industry is attaining large proportions. Cattle, which were formerly transported by sea, thereby necessitating a long

journey overland, to-day can be placed on board the cars of the Pan American Railway for shipment at Puerto, Mexico, and Salina Cruz, and when the connection into Guatemala is made a good portion of the coffee being produced there may also be thus exported.

An article deserving special mention is corn, which, owing to the high price it brings at the capital of the country, is now being carried there from the interior of Chiapas almost all the way by rail.

According to the data of the National Commission of Food Supplies there had been received from Chiapas during four months of 1910 over 100 cars of grain; besides this, large quantities have also been sent to the States of Veracruz, Puebla, and other places in the Republic. With the supply now in Chiapas and the amount sent out to various points, it is estimated that the total shipments during the season will approximate 250 to 300 cars.

Regardless of the rise in the price of grain in most sections of the country, in the interior of Chiapas the price has at times declined owing to the lack of adequate facilities for transporting the product and the fear that the grain might spoil en route. It may further be added that the farmers limit the cultivation of grain at the present time to the needs of home consumption, and that which is shipped from the State is merely the surplus of normal production. However, as soon as adequate and cheap means of transportation are provided, the production of corn can immediately be increased tenfold, and Chiapas can regularly ship to the center of the country 3,000 cars of cereals—since facilities for increasing the production in this State are unlimited—the soil is splendid, rains are regular, and crops are seldom lost.

If from the Pan American Railway the line toward the interior of Chiapas is built to reach the Grijalva River, there would be immediately available for cultivation and production all the Grijalva Valley, which is very rich and easy to work. That river is navigable for 200 kilometers, and in these regions two crops of corn are annually gathered. There are, moreover, thousands of hectares suitable for the cultivation of cotton, sugar cane, beans, precious woods and rubber trees, and cattle raising. The soil here is likewise well adapted to the cultivation of henequen. Other valleys, too, containing a million hectares of first-class land with abundant natural rain, would be thrown open for cultivation. The railroad here referred to has already been planned and surveyed, and when completed will add immensely to the wealth of Chiapas.

## POPULAR LECTURES BY CONSUL GENERAL SHANKLIN

Arnold Shanklin, the United States Consul General at Mexico, has recently delivered several lectures, both in Spanish and in English, on the Panama Canal. His talks are well illustrated with numerous

colored slides and have been favorably received by his audiences. Mr. SHANKLIN has recently been elected to membership in The Astronomical Society of Mexico, before which organization he has been invited to deliver his talk.

### POSTAL RECEIPTS, 1909–10.

According to figures published in the BULLETIN of the General Bureau of Posts of the United Mexican States, the revenues from the postal service in the Republic during the fiscal year 1909–10 amounted to 4,700,009.81 pesos, as compared with 4,313,747.03 pesos in 1908–9, or an increase of 386,262.78 pesos in 1909–10. The peso has a value of exactly $0.498 United States gold.

### SILVER EQUIVALENTS OF MEXICAN PESO.

The President of the Republic of Mexico has fixed for the first half of 1911 the following equivalents between the Mexican peso and the coins of countries where the silver standard obtains:

*Value of the Mexican peso in foreign coin.*

| | | |
|---|---|---|
| Bolivia | Bolivianos | $1.27 |
| Guatemala | Pesos | 1.27 |
| Salvador | do | 1.27 |
| Honduras | do | 1.27 |
| Nicaragua | do | 1.27 |
| Persia | Kranes | 7.03 |
| China | Taeles | .7495 |

### GENERAL SURVEY OF PUBLIC LANDS.

A commission of engineers, under the supervision of the Department of Promotion, has been appointed by the Mexican Government for the purpose of surveying, mapping, and classifying all public lands which come under federal jurisdiction, and, at the same time, rectifying former surveys and grants which are now in dispute. This commission will also include in its operations the surveys and reports of public-land denouncements.

The work has already been commenced in the State of Chihuahua, and will be carried from that point to other sections in northern Mexico.

### TAMPICO NOTES.

The following information has been received through the United States consul, CLARENCE A. MILLER, at Tampico, Mexico.

There is considerable activity in the motor-boat business at this time. The boats are in demand by the various oil companies, ranchers, and farmers along the Panuco and Tamsei Rivers and by the wealthy citizens of this port and vicinity.

A new brick schoolhouse is being built in this city at a cost of about $5,000.

Exports of honey have greatly increased during the past year. There were shipped from this port to the United States alone 863 barrels, containing 43,575 gallons, and valued at $21,380.

As a result of the work of paving the streets in this district, it is possible that large sales of automobiles and vehicles of all classes will be made during the current year.

The development of the oil fields in this section is having an important effect on the development of other industries. The great importations of oil-well machinery and oil-well supplies have increased the volume of business at the port of Tampico.

In the vicinity of Columbus cotton has been grown for the first time during the past year. The results have been such that plans are being made to cultivate a considerable acreage this coming season.

### HENEQUEN EXPORTS, 1910.

During the year 1910, 582,142 bales of henequen were exported from Yucatan, Mexico. The port of Progreso shipped 558,995 bales, while that of Campeche, 23,147. The bulk of these exports, 243,503 bales, were shipped to New Orleans. There are on hand at present in Progreso and Campeche 102,270 bales.

### MINERAL WEALTH OF THE NORTHERN DISTRICT OF LOWER CALIFORNIA, MEXICO.

George B. Schmucker, United States consul at Ensenada, Lower California, reports that the diversity of the mineral resources of the northern district is great. Gold, copper, silver, sulphur, iron, marble, lime, mineral waters, onyx, and granite are found in numerous localities, as well as one known deposit of salt. A variety of gems have been discovered, indications of petroleum exist, and it is reported that cement rock has been found. Six hundred mines and mining prospects of various kinds have been denounced and are now held by individuals through grants of title by the Mexican Government.

### THE EXPLOITATION OF ZINC MINES.

The reports that the calamine (carbonate of zinc) deposits of Missouri and Arkansas are almost entirely exhausted, and the possibility of a zinc scarcity in the United States, have directed the attention of producers toward the unexploited deposits of Mexico, where blende (sulphide of zinc) is found in many mining districts. Blende can now be concentrated by means of the magnetic process. This renders the exploitation of Mexico's deposits, heretofore regarded as of little value, feasible.

### FREE ENTRY OF CORN.

By virtue of a presidential decree, the free entry of corn through the ports of Yucatan, Mexico, has been extended until March 31, 1911.

### THE RIVER YAQUI DAM.

The most important irrigation works in northern Mexico are those now carried on in connection with the great dam which is being constructed in the Yaqui River. It will be second only to the Roosevelt Dam in Arizona.

Several United States capitalists are interested in the undertaking and are now buying lands covering a total area of 750,000 acres. Upon the completion of the Yaqui Dam it will be possible to irrigate about 500,000 acres, and later on, twice as much. It is being built on the site called Angostura, 20 miles from the Tigre mines.

### BUSINESS OPPORTUNITIES IN STATE OF TABASCO.

Advices from United States Consul ALPHONSE J. LESPINASSE, stationed at Frontera, State of Tabasco, indicate that abundant opportunities exist in that district for building up a trade in salted and canned sea foods; jewelry and other articles of gold, silver, and plated ware; and agricultural implements.

### AGATE MINE IN NUEVA LAREDO.

A productive agate mine is at present being developed by Mr. FRANCISCO CORTEZ, at Nuevo Laredo, Mexico. The agate is of fine quality, the colors ranging from white to red.

### MISCELLANEOUS CONSULAR NOTES.

An automobile stage line, making three trips weekly each way, has been established between Nogales and the gold placer mining district of Altar, Sonora.

The State of Sonora, Mexico, comprises an area of about 77,000 square miles, of which it is estimated 247,000 acres are devoted to agriculture. Extensive irrigation schemes are being carried out here.

A shipment of 5 tons of tuna cheese has recently been made from San Luis Potosi to San Antonio, Tex. There is a probability that this shipment will lead to the introduction of this article into the United States on a commercial scale.

The cultivation of sesame is the most important industry in the State of Acapulco. The crop for 1909 amounted to about 1,500 tons and yielded an average price of $56 per ton. It is said that the present increase in the demand for the crop will raise the price to $70 per ton.

On Lake Tamiahua, a short distance below Tampico, and extending about 34 miles along the coast line of the State of Veracruz, is a district which is claimed to be ideal for the cultivation of pine-

apples. Several companies have been organized to exploit this industry here.

The lands in the State of Tabasco are remarkably well adapted to the cultivation of bananas. The soil is fertile, the rainfall plentiful, and the network of rivers and streams which intersect the State in all directions afford unequaled and cheap water transportation.

### WORK ON THE TUXPAM CANAL.

It is expected that the canal between Tampico and Tuxpam will be completed within the next two years. Captain SHILLABER, who is the contractor in charge of the work, states that the canal is now open, though not completed, to navigation for river steamers as far as kilometer 133 on the Tanguijo River (about 85 miles).

### FIRM FOR DISTRIBUTION OF CATALOGUES.

A firm has been established in Mexico City which intends to keep in its offices as complete a file of catalogues of United States manufacturers as possible, for reference by prospective purchasers. They will prepare classified lists of dealers throughout Mexico, distribute catalogues among the business houses, and also conduct correspondence in Spanish with prospective buyers.

### RAILROAD CONCESSIONS.

The Supreme Government of the Mexican Republic has recently granted the following railroad concessions:

To the "Tramway Company of Mexico" for the development of two lines recently constructed.

To the same company for the construction of a railroad line in the Federal District.

To Mr. ALFRED SLATTER, for the construction and operation of a railroad in the State of Zacatecas, which, starting from the capital thereof, shall terminate at Tlaltenango, passing through Malpaso and Jerez, with a branch to Malpaso and Villanueva.

To Mr. BARTOLO RODRIGUEZ, for the construction of a narrow-gauge railroad from Arguelles Station, Tampico, on the Monterey division of the National Railroad lines, to Xicontencatl.

### RECENT CONCESSIONS.

Among the important concessions recently granted by the Mexican Government, the following may be mentioned:

To ANDRES RODRIGUEZ, for the utilization of the waters of the Patos stream, in the State of Coahuila, for the generation of motive power.

To José Rodriguez Cabo, for the exploration and exploitation of the petroleum and gas deposits which may exist in lands of the "Limon" hacienda, near the city of Valles, State of San Luis Potosi, and in the Canton of Ozuluama, State of Veracruz.

To P. Valenzuela, Sons & Co., for the establishment of navigation lines on the rivers Grijalva and Usumacinta, in the State of Tabasco, and on the Palizada River, in the State of Campeche.

To Messrs. Klotz & Clark, for the extraction of guano on various islands on the Pacific Ocean.

To Enrique Córdova, for the extraction of guano on various islands of Alacranes Bank.

To The Tigre Mining Company, for extensive mining operations at El Tigre, Sonora, Mexico.

## INAUGURATION OF INTERNATIONAL SCHOOL OF ARCHÆOLOGY.

On the 20th of January, 1911, Gen. Porfirio Díaz, President of the Republic of Mexico, formally dedicated the International School of American Archæology and Ethnology. The ceremonies, dignified and impressive, took place in the assembly hall of the National Museum, and were attended by high Government officials and eminent scientists and scholars of Mexico.

The school has for its object the advancement of the study of American archæology, ethnology, and anthropology. This is to be attained (1) by the proper training of young men to render them capable of making thorough investigations; (2) by undertaking scientific investigations; and (3) by publications, instruction, and other means which may be adopted.

The patrons of the institution are the Governments of Mexico, Prussia, and France, and the Universities of Columbia, Harvard, and Pennsylvania. Other Governments and scientific institutions may also become patrons by accepting the statutes of the school.

Besides patrons, the school shall have protectors, and as such the Hispanic Society of America in New York is expressly named in the statutes.

There shall be a director of the school, appointed and paid by each patron in turn, and whose term of office shall be for one year.

The managing committee of the school, composed of the delegates of the patrons and protectors, shall appoint the professors of the school.

A few days after the inauguration, the first class, under Dr. Eduardo Seler, delegate from the German Government, was assembled in the Hall of Monoliths of the National Museum.

# NICARAGUA

### THE INAUGURAL MESSAGE OF PRESIDENT ESTRADA.

The inaugural message which President JUAN J. ESTRADA read after taking the oath of office, on January 1, 1911, contains some very interesting statements, and outlines the progressive policy to be followed by the incoming administration.

Among the reforms and improvements suggested by General ESTRADA are, the construction of a railroad to the Atlantic coast; the development of agricultural methods and pursuits; the reduction of import duties and the abolition of export duties; the negotiation of a loan through the good offices of the United States; currency reform; and strict economy in the administration of the Government.

Advocating the constitutional prohibition of executive interference with the courts, the new President promises to respect their independence as sacred, and pledges himself to a course of noninterference in Central American political affairs.

### NEW CABINET.

Gen. JUAN J. ESTRADA, constitutional President of Nicaragua, has announced his new cabinet as follows:

Minister of Finance, Señor ADOLFO DIAZ.
Minister of the Interior, Señor CARLOS CUADRA PAZOS.
Minister of Public Works, Señor PEDRO JOAQUIN CHAMORRO.
Minister of Foreign Affairs, Señor DON TOMÁS MARTÍNEZ.
Minister of War, Gen. LUIS MENA.

### GREYTOWN A FREE PORT.

Advices just received from Nicaragua state that President ESTRADA has constituted San Juan del Norte, or Greytown, as it is popularly known, a free port.

# PANAMA

### IMPORTS, FIRST SIX MONTHS 1910.

Through the courtesy of ALBAN G. SNYDER, the United States Consul General at Panama, we are enabled to publish the following table, prepared by Doctor HENRIQUEZ, former Director General of

Statistics of the Republic of Panama, showing the imports into Panama for the first six months of 1910:

*Imports into Panama, by countries, for the first six months of 1910.*

| Country. | Weight in kilos. | Value in gold. |
|---|---|---|
| Germany | 6,739,835 | $528,362.49 |
| Belgium | 1,227,823 | 46,754.43 |
| China and Japan | 416,504 | 80,758.30 |
| Spain | 559,189 | 85,932.91 |
| United States | 50,473,718 | 2,980,370.18 |
| France | 1,067,274 | 157,691.64 |
| Great Britain | 6,910,607 | 1,018,517.05 |
| Spanish America | 2,013,473 | 94,347.07 |
| Italy | 329 918 | 83,736.30 |
| Switzerland | 12,832 | 49,691.41 |
| Total | 69,746,173 | 5,126,161.78 |
| Total for first six months of 1909 | 55,016,271 | 3,982,924.29 |
| Difference in favor of 1910 | 14,729,902 | 1,143,237.49 |

## WIRELESS STATION IN COLON.

The Government of Panama has entered into a contract with the United Fruit Company for the installation and operation by the latter of a wireless station at Colon for communication with Bocas del Toro. The service must be inaugurated within a year.

## LOAN FOR PANAMA CITY.

The National Assembly of Panama has authorized the municipality of Panama City to raise a loan of $50,000.

## LAW ON FISHERIES.

By a law of the National Assembly of Panama, the right of fishing in the territorial waters of the Republic is reserved to Panamanian citizens and foreigners residing in the country. Nonresident aliens who desire to engage in fishing must pay a tax fixed by the Executive power.

## BUTTON FACTORY TO BE ESTABLISHED.

It is reported that plans are on foot to establish a button factory in the city of Panama. As the raw material, both shells and ivory nuts, is here in plenty and all now exported, such an enterprise should prove successful.

## SCHOLARSHIPS IN CHILE.

The National Assembly of Panama has just passed a law providing for the establishment of 12 scholarships in Chile. Six are to be on behalf of the Panama Government. The 12 scholarships will be distributed as follows: 6 to young men of Panama Province, and the remaining 6 among the other provinces of the Republic.

### LAND OFFICE FOR CANAL ZONE.

By virtue of an Executive order recently issued by the President of the United States, a land office is created for the Canal Zone under the jurisdiction of the department of law, and subject to the superier jurisdiction of the chairman and chief engineer. The land office will be in charge of a land agent.

### BIOLOGICAL SURVEY OF THE PANAMA CANAL ZONE.

A biological survey of the Panama Canal Zone is about to be undertaken under the direction of the Smithsonian Institution.

President TAFT has approved the plan and suggested that such arrangements be made with the Secretary of War, the Secretary of Agriculture, and the Secretary of Commerce and Labor as would enable him to have their active cooperation in this important work. The arrangements are now in an advanced state, and field parties will be sent to the Isthmus at an early date.

The expenses of these parties will be borne from a fund contributed by a number of public-spirited friends of the institution.

### THE PANAMA-DAVID RAILROAD.

The National Assembly of Panama has enacted a law authorizing the President of the Republic to call for bids for the construction of a narrow-gauge railway, steam or electric power, from the city of Panama to David, with branches to Los Santos Province and the town of Anton.

To this end the Executive is authorized to raise a loan not exceeding $10,000,000, with interest at 5 per cent.

The engineers in charge of the survey of this road estimate its cost at $9,853,429.

## PARAGUAY

### NEW PRESIDENT AND CABINET.

Upon the resignation of Dr. MANUEL GONDRA as President of Paraguay, Col. ALBINO JARA, Minister of War in the former's Cabinet, assumed the Presidency on January 16, and constituted his Cabinet as follows: Minister of the Interior, Señor IBARRA LEGAL; Minister of Finance, Dr. JOSÉ A. ORTIZ, who held the same portfolio in the previous Cabinet; Minister of War, Señor GOIBURU; Minister of Foreign Affairs, Señor CECILIO BÁEZ, ex-President of the Republic; Minister of Justice, Worship, and Public Instruction, Señor MANUEL DOMINGUEZ.

### PRIVILEGES TO REFRIGERATING PLANTS.

Refrigerating establishments that may be established in Paraguay for the exclusive purpose of exporting their products shall enjoy, by virtue of a recent law of the National Congress, the following privileges:

Free entry of machinery, materials, etc., for the installation of plants and for the manufacture and packing of meats and other products.

Free exportation of frozen or chilled meats and other products manufactured by these plants.

Exemption from fiscal and municipal taxes.

Free use of public lands.

These privileges are to be granted until December 31, 1925.

### INSURANCE COMPANIES.

The Paraguayan Congress has recently enacted a law providing that foreign insurance companies must, before engaging in business in the Republic, buy Paraguayan property to the value of $75,000 gold, or deposit this sum in the Bank of the Republic, subject to withdrawal by the Court of Commerce. Companies duly established under the Treaty of Montevideo are exempted from this requirement.

### MISCELLANEOUS CONSULAR NOTES.

All freight shipped to Asuncion must be marked "*Transito para Asuncion*" in order to avoid customs duties in Montevideo and Buenos Aires.

The opening up of a fine section of Paraguay adjacent to Argentina, by railway communication, will, it is believed, greatly increase immigration into this country.

Efforts are being made to encourage the production of cotton in Paraguay, especially since cotton of good quality has been produced here in small quantities.

### PRICE OF LANDS IN PARAGUAY.

Practically no Government land in extensive tracts is available in Paraguay, according to advices from CORNELIUS FERRIS, Jr., the United States consul at Asuncion. Land must be purchased from private owners. Prices of grazing and quebracho lands range from $3,000 to $7,000 per square league. A Paraguayan square league contains about 4,633.125 acres, and is capable of sustaining from 600 to 1,000 head of cattle.

### ELECTRIC CONCESSION.

The American consul at Asuncion, Paraguay, reports that a concession has been granted to JUAN CAROSIO, of Buenos Aires, to construct and operate in the city of Asuncion and neighboring towns a system of electric railway lines for passenger and freight traffic; also to construct a station for furnishing electric light and power.

### RAILROAD NOTES.

The concession for the Transparaguayan route to connect Asuncion with the Atlantic coast has been transferred to Brazilian railway interests.

Plans for the construction of the line from Asuncion to the eastern boundary of Paraguay have been filed with the minister of interior.

# PERU

### THE REPUBLIC IN 1910.

"El Comercio," an influential daily of Lima, publishes in its issue of January 1, 1911, an article reviewing in detail the economic, political, and international conditions in Peru during 1910. We quote the following information from this review.

Speaking of the fiscal receipts during the year, the article says:

> The revenue of our maritime customhouses, which in 1909 amounted to £962,000, reached the sum of £482,000 during the first six months of 1910. Bearing in mind that the customs revenues are always greater in the second half of the year than in the first, it is reasonable to assume that this important item of our receipts will aggregate £1,000,000 for the whole year of 1910. The taxes collected by the "*Compañia Nacional de Recaudación*" (National Collection Company), which amounted to £695,000 in the first eleven months of 1909, in the same period of 1910 produced £779,000. The salt revenues amounted to £211,000 up to November 30, 1910, inclusive, as compared with £194,000 in the same period of 1909. It is therefore to be expected that the fiscal balance for 1910 will show an increase over 1909.
>
> We have no data on the total of our foreign trade during the year, but the figures on the customs revenues seem to indicate that, although not exceeding the trade of 1908, which reached £10,700,000, it will be greater than the commerce of 1909, which did not reach £10,000,000.

Referring to the means of communication, "El Comercio" states that in 1910, 696 kilometers of telegraph lines were built, against 452 in 1909.

Mention is made of the discovery of new vanadium deposits in the district of Mercapomacocha, Yauli Province, and in the district of Huaro, Canta Province.

During the year 25 new companies were established in Peru, with a total capital of £839,000, for the exploitation of the country's wealth.

### NEW PORT AND RAILROAD TO MOLLENDO.

The Supreme Government of Peru has authorized the "Peruvian Corporation" to submit, within three years, definite plans and specification for the construction of a new port in the Matarami Bay, north of Islay, and a railroad line between the new port and Mollendo, connecting also with the Mollendo-Arequipa Railway.

# SALVADOR

### ELECTION OF NEW PRESIDENT.

Señor Dr. Manuel Enrique Araújo and Señor Onofre Duran have been elected President and Vice President, respectively, of the Republic of Salvador for the four-year term commencing March 1, 1911, on which date they will be inaugurated.

### REVENUES AND EXPENDITURES, FIRST HALF OF 1910.

According to figures just received from the bureau of fiscal accounts of the Republic of Salvador, the Government receipts during the first half of 1910 amounted to $2,972,561, and the expenditures to $2,677,431.

### THE COFFEE CROP OF 1910.

The "Diario del Salvador" estimates the coffee crop of 1910 at 650,000 quintals,[a] which would be an increase of 150,000 quintals over the 1909 crop. The estimates are based upon reports received by the "Diario" from its agents in the different points of the Republic.

### NEW MACHINERY IN SALVADOR.

In a recent dispatch Consul General Thos. E. Dabney, of San Salvador, reports that a large machinery company of the United States has recently placed two of its elaborate tire-setting machines in Salvador with notable success. The commandante at Sensuntepeque (Cabanas) has written to the manufacturers describing the satisfaction felt at the efficiency of the machines, and the buyers have likewise evinced entire satisfaction.

# UNITED STATES

### RECEPTION OF UNITED STATES MINISTER.

With the usual formalities established by diplomatic practice, Dr. Eliodoro Villazón, President of the Republic of Bolivia, officially received Hon. Horace G. Knowles, the United States Envoy Extraordinary and Minister Plenipotentiary accredited to that country. Speeches characterized by expressions of friendship and good will toward each other were delivered by both President Villazón and Minister Knowles.

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[a] A quintal is equivalent to 220.46 pounds.

# URUGUAY

### FRUIT EXPOSITION IN MONTEVIDEO.

The President of Uruguay has authorized the Bureau of Agriculture to arrange for an exposition of fruit and kindred industries in Montevideo. The exact date has not yet been fixed. The prizes will consist of gold, silver, and bronze medals, and diplomas of honor. This will be the first exposition of its kind ever held in Uruguay, and the fruit growers throughout the Republic are manifesting great interest in the event.

### ELECTRIC-LIGHT CONCESSIONS.

The General Assembly of Uruguay has issued a concession to Da Silveira Bros. for the installation and operation of an electric-light plant in the town of Melo, Cerro Largo. The term of the concession is 25 years.

A similar concession has been granted to Carbonell & Co. for the electric-lighting of Trinidad, Department of Flores.

### COMPETITION FOR A MONUMENT TO ARTIGAS.

The National Centennial Commission of Uruguay invites sculptors throughout the world to participate in a competition for designs for a monument to be erected in Montevideo in honor of Gen. Artigas, the hero of Uruguayan independence.

The figure of General Artigas will be in the form of an equestrian statue in bronze. The symbolic figures and haut and bas-reliefs ornamenting the monument are also to be in bronze. The architectural part of the monument will be made of Uruguayan pink granite from "Las Piedras." The only inscription to be placed on the monument will be the word "Artigas."

Competitors must submit their designs on or before July 18, 1911, addressed to the "*Presidente de la Comisión del Centenario, Palacio Municipal, Montevideo, Uruguay.*"

The competitor whose design is judged to be the best will be given the contract for the execution of the monument, The designers of the models adjudged by the jury to be second and third in point of merit will be awarded prizes of $2,000 and $1,000 gold, respectively.

The cost of the monument is fixed at $100,000 gold.

A copy of the conditions of the competition is on file at the Pan American Union.

### THE NEW MILITARY AND NAVAL SCHOOL.

The magnificent new building of the Military and Naval School of Montevideo was formally inaugurated by President WILLIMAN on December 29, last. The building, which is a most beautiful structure, is equipped with all modern improvements.

### TRADE NOTES.

The Vice Consul at Montevideo reports that there is an opportunity in his district for introducing moving-picture machines, and films descriptive of the United States. He states that there is also a demand for motor boats.

### THE URUGUAY CENTRAL RAILROAD.

The revenues of the Uruguay Central Railway, a British Company operating several important lines in the Republic, amounted to £937,182 in 1909–1910, an increase of £456,059 over the receipts in 1908–09. The expenditures aggregated £456,059, against £483,262, or an increase of £27,000.

This increased traffic is an evidence of the progressive development of Uruguayan rural life. The greater part of the increase was contributed by the transportation of merchandise and cattle.

### RAILROAD NOTES.

Vice Consul F. L. GODING, at Montevideo, reports that the first section of the branch railway line, which will eventually run from Nico Perez to Treinta y Tres, has been opened. The section opened runs between the towns of Jose Battle y Ordonez and Treinta y Tres.

## VENEZUELA

### RAILROAD REVENUES AND EXPENSES.

During the third quarter of 1910 the revenues and expenditures of the railroads of the Republic were as follows:

| Railroads. | Revenues. | Expenses. |
|---|---|---|
| | *Bolivars.* | *Bolivars.a* |
| La Guaira á Caracas | 447,972.02 | 221,896.59 |
| Gran Ferrocarril | 483,174.67 | 333,243.21 |
| Ferrocarril Central | 95,884.65 | 68,184.04 |
| Maiquetía á Macuto | 14,155.50 | 14,019.65 |
| Puerto Cabello á Valencia | 184,376.27 | 157,464.16 |
| Carenero | 60,962.60 | 53,870.20 |
| Coro á La Vela | 6,918.37 | 7,408.33 |
| Bolívar | 353,861.80 | 287,220.10 |
| Guanta | 20,108.65 | 20,108.65 |
| La Ceiba | 189,753.89 | 123,907.84 |
| Táchira | 194,007.01 | 137,628.40 |

[a] The bolivar is equivalent to approximately 20 cents, United States currency.

### VITAL STATISTICS, FIRST HALF OF 1910.

According to figures received from the General Bureau of Statistics of Venezuela, during the first six months of 1910 there were 48,887 births, 27,240 deaths; net increase in population, 17,647.

### SANITATION OF THE REPUBLIC.

For the purpose of promoting sanitation and hygiene in the ports, cities, and towns of the Republic, the President of Venezuela has issued a decree establishing a tax of 1 per cent upon the total charges of merchandise imported. The revenues derived from this tax shall be spent under the direction of the Central Governing Board of Public Health, constituted by the Chamber of Commerce of Caracas, in accordance with the same decree.

### NEW BANK FOR VENEZUELA.

Plans are under way for the establishment of a commercial, agricultural, and mortgage bank (Banco Comercial, Agricola e Hipotecario), with a principal office at Caracas, and branches in other cities of the Republic. The capital of the concern is said to be 30 millions bolivars ($5,790,000), in shares of 500 bolivars each.

### POWER AND ELECTRIC LIGHT PLANT.

A consular report from La Guaira indicates that a group of capitalists of Caracas and La Guaira have organized the "*Compania Generadore de Fuerza y Luz Electrica*" (the Power and Electric Light Generating Company), with a capital of $530,750. This company is to complete and operate the electric power plant at the falls of Mamo, about 10 miles from La Guaira, and to operate that in connection with the La Guaira electric plant which now supplies light to several adjacent cities.

### THE COFFEE AND CACAO CROPS.

According to the United States Consul at La Guaira, Venezuela, reports from the various coffee districts of Venezuela indicate that the crop which is now being gathered will be smaller than that of 1909–10.

The total crop of Venezuelan coffee will likely not exceed 25,000 metric tons or 440,920 bags. Of this about 160,000 bags may be expected from the ports of La Guaira, Puerto Cabello, Carupano Guanta, Sucre, etc., and the balance from Maracaibo, Vela de Coro, etc.

Reports from the cacao districts are more encouraging as to crop prospect, and this output will no doubt equal that of 1909, which amounted to 16,618 metric tons.

INTERNATIONAL UNION OF AMERICAN REPUBLICS

# BULLETIN

OF THE

# PAN AMERICAN UNION

MARCH 1911

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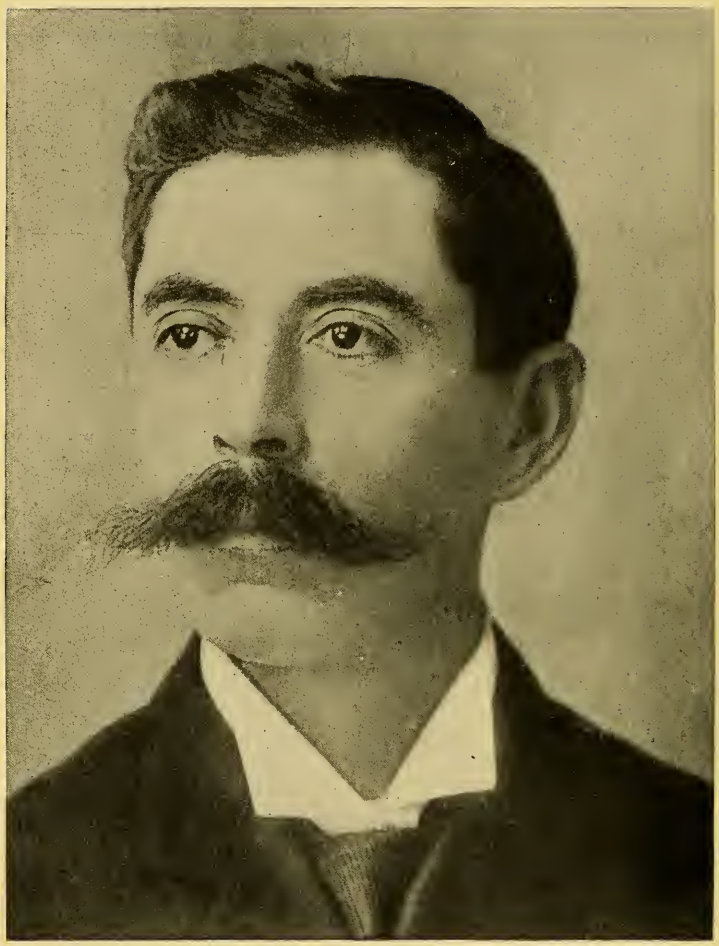
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DR. MANUEL E. ARAUJO,

Inaugurated President of the Republic of Salvador, on March 1, 1911.

Dr. Araujo was born in Juayua, about 45 years ago. He studied medicine at the University of San Salvador, graduating with honors when he was only 22 years old. After practising his profession for several years and distinguishing himself as an able surgeon, he became interested in agriculture and at the same time took an active part in politics. In 1907 Dr. Araujo was elected Vice President of the Republic, serving with his predecessor, General Figueroa, until his inauguration as Chief Magistrate of the Nation.

BULLETIN
OF THE PAN AMERICAN UNION

VOL. XXXII. MARCH, 1911. NO. 3

THE Pan American Commercial Conference outlined in preceding issues of the BULLETIN met as planned in the new building of the Pan American Union from the 13th to the 17th of February, and adjourned after a far more successful series of sessions than even its best friends had anticipated. The full record of the proceedings will be published in a special volume which is now in the hands of the printers and therefore only a limited space is given to its consideration in this issue of the BULLETIN. Elsewhere in this number appear the addresses of the opening day, together with a list of the speakers on the succeeding days. Over 600 delegates, representing the principal commercial organizations and the leading manufacturing, exporting, and importing firms in all parts of the United States, actually registered as being present, and the fact that the majority of them remained in Washington for five days and that the closing session, Friday, was as well attended as the opening one on Monday proves the interest which they took in the conference and its discussions. The addresses of the first day, delivered by President TAFT, Secretary of State KNOX, the Minister of Costa Rica, the Minister of Bolivia, Special Ambassador of Mexico, JOAQUÍN D. CASASÚS, Hon. CHAMP CLARK, Speaker-elect of the House of Representatives, Mr. J. A. FARRELL, President of the United States Steel Corporation, gave a start and tone to the gathering the influence of which was felt through all the sessions. Senator ROOT, who was unable to speak Monday, because of pressing business in the Senate, came Friday morning, and delivered one of the best speeches of the conference. The majority of the Latin-American diplomatic corps in Washington and many of the Latin-American consular officers in New York participated in the program. The number of trade experts who also engaged in the discussions was greater than has ever met at any other commercial conference in this country.

While this gathering had many shortcomings which can be avoided at a succeeding conference and while it did not begin to accomplish all that was desired, it is gratifying to note that the great majority of those

in attendance were sincerely appreciative of its purpose and achievements. As evidence of how it was regarded, a number of quotations are given below from letters which the Director General has received from persons who were in attendance.

FRANKLIN JOHNSTON, publisher of the American Exporter, 135 William Street, New York, says:

We want to congratulate you very heartily on the success of the Conference, and hope that you will feel sufficiently encouraged to make the venture an annual one.

M. HARTLEY DODGE, chairman, Remington Arms-Union Metallic Cartridge Company, 299–301 Broadway, New York, says:

The report of our delegates to the recent Pan American Commercial Conference has been so satisfactory that I wish to express to you our appreciation not only for the information secured through the careful handling of the conference, but also for the courtesy and attention shown our representatives by you and your associates.

WILLIAM M. BENNEY, manager Foreign Department, National Association of Manufacturers, 30 Church Street, New York, says:

I congratulate you most heartily on the great success of the Conference, both in the number and character of those in attendance and in the manner in which all the proceedings were conducted. I believe that it will have a most potent influence in aiding in the establishment of still closer commercial relations between this country and the Latin American Republics, and, what is of equal importance, in paving the way for a clearer understanding of the personal merits of the peoples of the various countries

LEWIS NIXON, one of the delegates of the United States to the Fourth Pan American Conference at Buenos Aires, says:

You are certainly to be congratulated upon the way in which you carried out this affair (Pan American Commercial Conference).

The Chicago Association of Commerce, 77 Jackson Boulevard, through one of its officers, says:

The Association has just had an extensive report from Mr. ENRIGHT, in which he told at length of the splendid meeting of the Pan American Commercial Conference, and we hasten to congratulate you upon the success of these meetings.

LORENZO DANIELS, the New York agent of the Lamport & Holt Steamship Company, says:

Allow me to add my congratulations upon the success of your Pan American Commercial Conference. I feel confident that a great deal of practical good will result, as the keynotes of the situation were constantly brought forward. We shall now look for a material increase in travel and will try to make our preparations accordingly.

SERENO S. PRATT, secretary of the Chamber of Commerce of the State of New York, says:

I desire to congratulate you upon the success of the Pan American Commercial Conference, and regret that I was not present at the session on Friday when resolutions were passed appreciative of the labors of your valuable institution devoted to the upbuilding of Pan America trade.

Hon. HENRY B. F. MACFARLAND, late chairman of the Commission of the District of Columbia, says:

Let me offer my heartiest congratulations upon the great success of your Pan American Conference.



SEÑOR DON ENRIQUE OLAYA HERRERA,

Minister of Foreign Affairs of Colombia.

Prof. L. S. ROWE, of the University of Pennsylvania, chairman of the United States delegation to the Pan American Scientific Congress held at Santiago, Chile, and one of the leading authorities on Latin America, says:

I want to take the first opportunity to offer you my most cordial congratulations on the splendid success of the Pan American Commercial Conference. It was a real inspiration to everyone who was present and you have done a service to the cause which only those who are well acquainted with the situation can fully appreciate. It was a privilege to address the eminent body which you assembled.

Hon. W. F. SANDS, former United States Minister to Guatemala, says:

I wish to congratulate you upon the great success you have accomplished. It was of interest not only to manufacturers and business men, but even more so to those of us who have made a special study of Latin America and who go to those missions from preference.

S. C. MEAD, secretary of the Merchants' Association of New York, says:

Permit me to extend to you congratulations upon the unqualified success of the Pan American Conference, just held under your initiative and auspices. The association was represented by some 12 or 15 of our members, all of whom have expressed great satisfaction concerning the Conference.

ALFRED J. THOMPSON, 71 Broadway, New York, says:

It would be almost unbecoming of me to give you my frank impression of the Conference, as it would appear like personal as well as national flattery. We of the United States having interest in South America owe a great deal, more than can be readily comprehended, to the good work which has been accomplished.

WILLIS BRUCE DOWD, 141 Broadway, New York, says:

It is not an exaggeration to say that I was greatly surprised and delighted at what I saw and heard during the Conference. It was a big undertaking, I know, but it was conducted in a masterful way. I was struck with the minute details of the arrangements for the accommodations of the delegates. It was certainly working the thing out to the last analysis. The exhibits of charts showing all the commerce of the Pan American countries was another thing which showed excellent foresight and judgment.

S. K. SMITH, treasurer HARLAN & HOLLINGSWORTH CORPORATION, Wilmington, Delaware, says:

It was the most interesting Conference that it has been my pleasure to attend, and my only regret was that I could not remain during the entire session.

WILLIAM R. TUCKER, secretary Philadelphia Board of Trade, says:

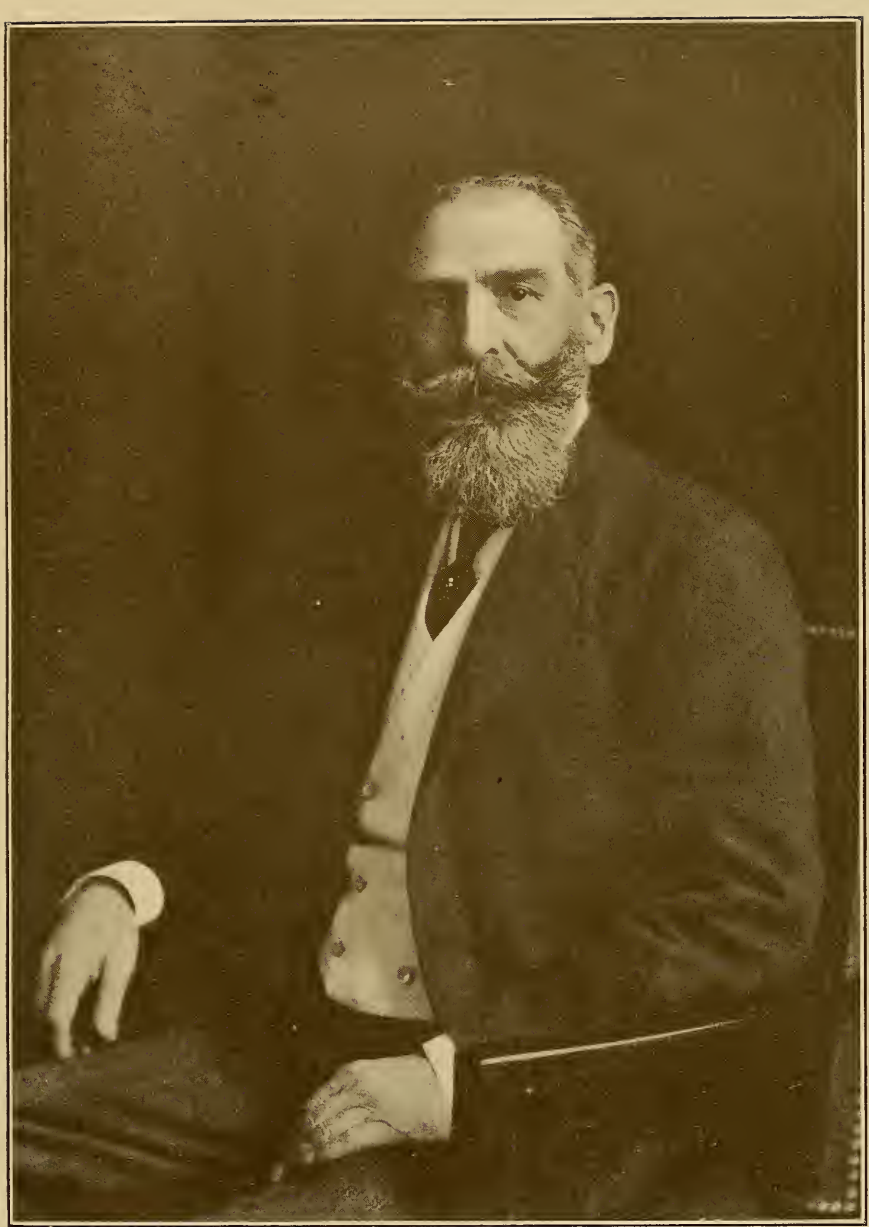
The Conference will undoubtedly result in establishing more cordial diplomatic relations and in extending the trade relations between the countries.

CARLOS R. DUQUE, secretary The Star and Herald Company of Panama, 17 Battery Place, New York, says:

I take this opportunity of congratulating you upon the success of the Conference, which I believe has awakened the manufacturers of the United States to the realization that there is a great and good field open to them in Latin America.

F. H. NEWELL, director of the United States Reclamation Service, says:

The Pan American Commercial Conference was an unquestioned success, and it is hoped that these conferences will become an established institution.



Photograph by Clarke, Mexico, D. F.

SEÑOR DON EDUARDO SUAREZ MUJICA,

Newly appointed Envoy Extraordinary and Minister Plenipotentiary of Chile to the United States.

ALBERT T. FREEMAN, treasurer of the JOHN B. STETSON COMPANY, Philadelphia, says:

I am glad to say that I was very favorably impressed with the sessions of the Pan American Conference which I was able to attend, and found the information contained in the formal addresses and the informal discussions of great interest.

WILLIAM S. COX, of J. & V. SELIGMAN & Co., bankers, New York, says:

It was a great pleasure for me to attend the Conference, and you are to be congratulated that so many representative interests were present and showed such a live interest in the meetings. I believe that the Conference has opened the eyes of many people to the wonderful field awaiting American enterprise and that the coming year will show American manufacturers taking advantage of markets of which heretofore many have been ignorant.

A. B. FARQUHAR, president of A. B. FARQUHAR COMPANY (Limited), of York, Pennsylvania, says:

I consider the Pan American Commercial Conference, whose sessions I regularly attended, one of the most important business gatherings in the history of this country.

FRANK A. BRANDA, president LATIN-AMERICA EXPORT COMPANY, 11 Broadway, New York, says:

I think that the Conference was one of the finest things that could possibly have been arranged, and it is almost unnecessary for me to congratulate you upon its success

C. G. STONE, of the LAMBERT PHARMACAL COMPANY, New York, says:

There is no organization that I know of that is in a position to do as much good for business men as that which you represent, and if the manufacturers have wit enough to avail themselves of the information which can be easily secured through the Pan American Union, they will have little cause to complain. I congratulate you upon the wonderful success of the Conference.

ATHERTON BROWNELL, president of The Century Syndicate, 50 Church Street, New York, says:

I am not sure but that the element of greatest value in the Conference, when all is said and done, was the bringing together of many people from various parts of the country, and even the world, in such a way as to create friendship and cement relations which may lead to a very much better and closer understanding between the merchants of the United States and those of South America.

Nearly all the members of the Latin-American diplomatic corps in Washington have also been good enough to express to the Director General the good the Conference did to acquaint the representative men of the United States with the real progress and development of the Latin American countries. The discussions which brought out facts and figures in regard to the onward movement of each one of the nations lying to the south of the United States surprised the majority of those in attendance and caused them to go away with new and greater respect for the sister Republics of the United States.

The Director General has pleasure in taking advantage of this opportunity to emphasize the loyal and helpful cooperation which he received from the entire staff of the Pan American Union in preparing for and in carrying through the Conference. The appreciation on the part of the Conference of the attention shown those present by each member of the staff was attested by the unanimous resolution of thanks to the entire personnel of the office passed just before adjourning.



Photograph by Harris-Ewing.

PHOTOGRAPH OF LUNCHEON OF SPECIAL AMBASSADOR CASASÚS TO SECRETARY OF STATE KNOX.

One of the enjoyable functions given by the Special Ambassador of Mexico, Joaquín D. Casasús, while here on special mission, was a luncheon tendered in honor of the Secretary of State of the United States, Philander C. Knox. This was held on Tuesday, January 31, 1911, in the magnificent Hall of the Americas in the Pan American Union Building. There were present at this event about sixty guests from official and diplomatic ranks of Washington, representing nearly every section of tha world

## SPECIAL REPORT OF THE PROCEEDINGS.

There has been such a demand for the full report of the proceedings of the Pan American Commercial Conference described in the previous editorial and elsewhere in this BULLETIN, that a special volume containing all the addresses and discussions is now being prepared and printed. Inasmuch, however, as the Pan American Union possesses no fund to pay for the cost of such a publication, it will be necessary to make a charge of 50 cents a copy. All persons who may desire this report can secure it by remitting this amount to the Pan American Union. This will probably be the most complete collection of expert opinion upon Pan American trade which has ever been assembled under one cover, and it will be illustrated by special charts, showing the export and import trade of each one of the American Republics.

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## LEWIS NIXON ON THE STUDY OF SPANISH.

From time to time the Pan American Union has, in the columns of the BULLETIN, and again in its correspondence with universities, colleges, and schools, urged a more general study of the Spanish and Portuguese languages. Its efforts have been rewarded with a certain measure of success, but there should be far more progress made in this direction if the coming generation of our men would be trained so that they will be competent to get into closer touch with their brethren of the Latin American Republics. Mr. LEWIS NIXON, the distinguished shipbuilder of New York City, and member of the Delegation of the United States to the last Pan American Conference, has recently written to the Director General a letter on this point which, in view of the standing and reputation of the author, is quoted below:

Referring to our conversation during the session of the recent Pan American Commercial Conference, in which you spoke of the strong conviction of every speaker as to the necessity of a knowledge of the Spanish language in commerce with Latin America, I hope that this matter can be brought strongly before our universities. They are always most anxious to adapt education to national needs, and as we become a world power we must perforce do business at times in other than the English language.

A number of the universities now require German and French in entrance examinations for the technical or nonclassical courses. While I can appreciate the sentiment of a citizen of German birth or descent that makes him wish to have his son taught German, every business man knows that there is no comparison in the trade values of Spanish and German.

So, even if the controlling powers of our universities are averse to substituting Spanish for German, it could at least be made optional. With the full understanding that I shall be making myself unpopular, I should also urge—in view of the very great value of Spanish to our youth—that where Latin and Greek are required, Spanish should be allowed as a substitute for either. It is a practical Latin language. Such preference for Spanish on the part of our great universities would give a great impetus to its study, with consequent profit to the coming generation in all lines of human endeavor, especially political and commercial.



Photographby Harris-Ewing.

SEÑOR DON ARTURO PADRÓ Y ALMEIDA,

Chargé d'Affaires of Cuba in Washington.

## AN INTERNATIONAL ANTI-LOCUST COMMISSION.

J. LAWRENCE-HAMILTON, M. R. C. S., of 30 Sussex Square, Brighton, England, sends us a reprint from the London "Financial News" of February 13, 1911, in which he urges the organization of an International Anti-locust Commission. He points out what an enormous amount of capital is invested in Argentina and in the development of its agriculture, and then shows the immeasurable damage done by the locusts, thereby presenting a strong argument for a study of conditions which would result in the practical handling of the locust problem. He refers to the wonderful results which have come from the efforts to suppress the mosquito, and claims that similar success can meet a fight against the locusts.

## THE YALE SCIENTIFIC EXPEDITION TO PERU.

Prof. HIRAM BINGHAM, who is at the head of the Latin-American History Division of Yale University, in a letter to the Director General, gives the following information, which will be interesting to all persons watching the scientific studies of the Latin-American countries:

> You will be interested to know that we have raised the money for a Yale Scientific Expedition to Peru, which is to leave in June (1911) and to be gone six months. I shall take with me a geologist and a topographer, and possibly two assistants if I can raise the money for their expenses. We already have money enough for the geologist and topographer. We intend to determine the location and depth of Lake Parinacochas; the location and geological structure and height of Mount Coropuna; the location and extent of the ruins of the Inca city and fortress, Choqquequirau, and the existence and extent of other Inca cities which may be concealed in the Montaña of the Apurimac and Urubamba Valleys. You know it has long been a problem how far into the jungle the Incas actually pushed their settlements. I hope we can add something to the solution of this interesting subject. I have just had a letter from President LEGUIA, who favors the project, and will give us Government assistance. I have visited part of this region on my last trip to Peru, and I hope to be able to add something to the scientific knowledge of Peruvian geography, geology, and history.

Prof. BINGHAM has our best wishes for the success of his undertaking. He has already added much to our knowledge of that part of the world and he never undertakes anything of this kind without bringing back a large amount of useful scientific information.

## THE SOUTHERN COMMERCIAL CONGRESS.

There has just been held in Atlanta, Georgia, March 8–10, one of the most important conventions which has ever assembled in this country. It was the third annual meeting of the Southern Commercial Congress. The pamphlet issued by the committee in charge was entitled, "1861–1911, The South's Physical Recovery," and the purpose of the gathering was indicated in the words "The South, Its Resources, Its Progress, Its



Photograph by Harris-Ewing.

SEÑOR DON ROBERTO MACDOUALL,

First Secretary of the Legation of Colombia.

Prospects, Its Destined Share in National Development." The Atlanta Chamber of Commerce acted as host. The officers of the Southern Commercial Congress are: President, JOHN M. PARKER, New Orleans, La.; First Vice President, Hon. DAVID R. FRANCIS, St. Louis, Mo.; Second Vice President, Gen. JULIAN S. CARR, Durham, N. C.; Secretary, EDWIN L. QUARLES, Washington, D. C.; Commissioner of Agriculture, CLARENCE J. OWENS, Washington, D. C. The managing director, who is a man of remarkable energy and devotion to the cause, is G. GROSVENOR DAWE, also of Washington, D. C. Among those who participated in the program of the conference were President WILLIAM H. TAFT; ex-President THEODORE ROOSEVELT; the Ambassador of France; the Ambassador of Great Britain; the Ambassador of Mexico; the Secretary of War; Gov. WOODROW WILSON, of New Jersey; Senator FLETCHER, of Florida; Secretary of Agriculture JAMES WILSON; GEORGE W. PERKINS, of New York; GEORGE WESTINGHOUSE, of Pittsburg, Pa.; J. W. PORCH, of New Orleans, La.; BERNARD N. BAKER, of Baltimore, Md.; JOHN TEMPLE GRAVES, of New York; ELMER E. BROWN, Commissioner of Education; C. H. SHERRILL, United States Minister to Argentina; Congressman RANSDELL, of New Orleans; Surg. Gen. WALTER WYMAN; Director General JOHN BARRETT, of the Pan American Union; and many others. Particular reference is made to this conference in the MONTHLY BULLETIN because one of the features of the program is the consideration of the Panama Canal and Pan American trade relations. The South is awakening to the fact that much of its future prosperity depends upon the development of greater exchange of trade between its resourceful States and the developing countries of Latin America.

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### FORMER SECRETARY OF THE UNITED STATES LEGATION AT LA PAZ.

ALEXANDER BENSON, the former Secretary of the American Legation at La Paz, Bolivia, was born in Philadelphia, Pennsylvania, June 23, 1873. After receiving his elementary training in the public schools, he entered Princeton University, graduating therefrom with the degree of A. B. in 1894. He then pursued the study of law at the University of Pennsylvania, and in 1898 graduated with the degree of LL. B. The same year Mr. BENSON was admitted to the practice of law at the Philadelphia bar and was actively engaged in his profession for about ten years. On August 4, 1909, he was appointed Secretary of the legation at La Paz, and subsequently was chargé d'affaires of the legation. Mr. BENSON has just been transferred to the Embassy at St. Petersburg, Russia, as Secretary.

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### EXHIBITION OF UNITED STATES ARTISTS AT MONTEVIDEO.

The Director General is in receipt of an interesting letter from Hon. EDWIN V. MORGAN, the United States Minister to Uruguay and Paraguay, under date of January 27, in which he describes the preparations



ALEXANDER BENSON,

Former Secretary of United States Legation, La Paz, Bolivia.

which were being made for the exhibition of United States artists, inaugurated on February 6, in Montevideo, the capital of Uruguay.

Mr. MORGAN says:

> The preparations for the exposition of pictures and small bronzes by United States artists in Montevideo are progressing, and the exhibition will be inaugurated on February 6 by a reception to which the President and prominent people in the official and social world are invited. The section of pictures which was shown at the International Expositions at Buenos Aires and Santiago de Chile are being installed in the exhibition pavilion in Parque Urbano, under the charge of Mr. CHARLES FRANCIS BROWNE, of Chicago, the director. The section of new work which Mr. TRASK has selected at home, and which has not been seen in South America, should reach here on the Lamport & Holt boat in a few days. The municipality, which loans the pavilion, the public, the art connoisseurs, and the press are all interested. The main object of our effort ought to be attained, namely, to familiarize the people of Uruguay with the fact of which they are at present, in a measure, ignorant, that all really artistic pictorial art does not originate in Latin countries and that in the United States we are gradually developing a native school, which though still partly trained abroad and largely on the continent of Europe, springs from the Western Hemisphere and is founded on American ideals.

Mr. MORGAN is deserving of special congratulations upon the effort he has made to arrange this exhibition and the steps taken to remove the peculiar impressions which exist in many Latin American countries in regard to the art of the United States. A detailed description of this exhibition appears elsewhere in this issue of the Bulletin.

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## REPORT OF DELEGATES TO THE BUENOS AIRES CONFERENCE.

The report of the Delegates of the United States to the Fourth International Conference of American States has just been received from the Government Printing Office. It is an interesting document, carefully prepared, and gives an excellent idea of what was done at this great gathering in Buenos Aires. Copies can now be obtained either from the State Department or from the Pan American Union. The Delegates of the United States to this conference were: HENRY WHITE, former Ambassador to Paris; Brig. Gen. E. H. CROWDER; LEWIS NIXON, a leading business man of New York City; Prof. J. B. MOORE, of Columbia University; Dr. BERNARD MOSES, of the University of California; L. C. QUINTERO, a prominent lawyer of New Orleans; Prof. PAUL S. REINSCH, of the University of Wisconsin; and DAVID KINLEY, dean of the Economic Faculty of the University of Illinois. Prof. W. R. SHEPHERD, of Columbia University, was Secretary.

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# SPEECHES AT OPENING SESSION OF PAN AMERICAN COMMERCIAL CONFERENCE

THE Pan American Commercial Conference, to which invitations were extended to the principal commercial organizations and business firms of the United States, as well as to the diplomatic and consular officers in the United States, by the Director General of the Pan American Union, met in the Hall of the Americas of the new building of the Union during the week of February 13–17, 1911. The inaugural session convened at 3 o'clock on the afternoon of Monday, the 13th, and the concluding session was held on the afternoon of Friday, the 17th. Inasmuch as the full proceedings are to be published in a special volume, it has seemed best to give below only the addresses delivered upon the opening day, and that of Senator ROOT, given on Friday, February 17.

A copy of the printed report of the proceedings covering over 300 pages and including all the addresses and discussions will be sent to any person upon the receipt of its cost—50 cents.

When the Director General arose to introduce the speakers, Monday afternoon, he faced an audience which completely filled the hall, including a majority of the diplomatic corps, many Senators and Congressmen, and nearly 700 delegates from all parts of the United States. In his introductory remarks the Director General said:

*Mr. President, Mr. Secretary, and Members of the Diplomatic Corps, Ladies and Gentlemen:*

In welcoming you here this afternoon in my capacity as executive officer of the Pan American Union I shall take up only a moment of your time.

It is not necessary to point out in detail the objects of this meeting; they were fully explained in the invitation which most of you have seen or received.

In general terms, it can be said that this Conference was prompted by the overwhelming correspondence which has been pouring into this office during the past year asking for information about an extraordinary variety of matters regarding the conditions and possibilities of trade between the United States and the 20 Latin American Republics.

The work of this institution has quadrupled during the last few years, until now it has become a practical clearing house, as it were, for the exchange of useful data concerning all the American nations.

It seemed wise, therefore, to concentrate efforts to get into closer touch with the situation by inviting here, on the one hand, manufacturers, exporters, and importers,

and others desiring information; and, on the other, those officials, authorities, and commercial experts familiar with Pan American trade, to exchange views and opinions, to ask and answer questions, and engage in such appropriate discussion as would greatly help the growing movement to build up Pan American commerce and comity and to get ready for the Panama Canal, which is nearing completion and means as much for South America as it does for North America.

Particularly is it desirable that the *exchange* of trade should be carefully considered—the buying from, as well as the selling to, Latin America—for only in that way can a permanently prosperous and mutually beneficial commerce be maintained between the American countries.

The cordial response to the invitation to participate in this Conference which has come from all sections and from all classes of men interested is most gratifying, and this afternoon our records show that 12 commercial clubs, 25 boards of trade, 32 chambers of commerce, and 42 other trade bodies, together with approximately 531 manufacturing, exporting, and importing firms, and no small number of individuals or delegates, have expressed a desire to attend the Conference.

Hundreds of others, unable to be represented, have sent words of hearty approval and asked that copies of reports of the Conference be forwarded to them.

I am grateful for the participation of the President, the Secretary of State—who s also Chairman of the Governing Board of the Pan American Union—the Latin American Diplomatic Representatives, who also belong to its Governing Board, and the other distinguished guests who are here to-day or will take part on other days.

The Director General then introduced Hon. PHILANDER C. KNOX, the Secretary of State of the United States, and Chairman of the Governing Board of the Pan American Union.

Secretary KNOX said:

GENTLEMEN: You have met at an important stage in the evolution of the industrial and commercial relations of the Republics of the Western Hemisphere. The significance of this Congress can hardly be overestimated. It meets for the discussion of practical subjects, for the dissemination of information, for the interchange of ideas in regard to the exchange of trade.

It is fitting that the Pan American Conferences which are now held at regular intervals should be followed by commercial Pan American Congresses such as this one, which supplements the broad general work of those gatherings in establishing closer relations and promoting the principles of peace among the different countries. It conserves and fructifies the resolutions and recommendations of those Conferences and it opens the channels for putting into effect the principles they lay down. The approach of the Americas was the aspiration voiced by that illustrious statesman and publicist the late JOAQUIN NABUCO, who, as Ambassador of the Brazilian Republic, participated in so many movements for the improvement of the relations of all the countries of this hemisphere. His services to mutual peace and good will, and to that closer commercial intercourse which is at once the harbinger and the advocate of such good will, will long be remembered. Speaking from his position as the representative of a great southern Republic he once told us of the good that Latin America would derive from closer intercourse with the United States. He also told us that the benefit which we of the United States would derive from that intercourse at first would be only the good that comes from making friends. We were satisfied with that good, but already we see how it also leads to and embraces the sphere of trade interests.

The educational value of gatherings such as this, where commercial expansion may be discussed in all its aspects, is very great. Let me candidly confess that in the past we have been too ignorant of our southern neighbors, their vast undeveloped resources, and the measures they have been taking to open themselves to the world.

Happily that ignorance is disappearing. The mists began to clear away when in 1889 JAMES G. BLAINE seriously initiated a Pan American commercial policy. They were further dissipated when my distinguished predecessor made his memorable trip around South America. The cordiality of the welcome given him by our neighbors to the south is yet fresh in our memories. This journey, supplemented by subsequent visits on his part to other Latin American countries, promoted a better understanding on their part of our commercial aims and expectations. It had even a greater influence on the people of the United States in educating them in regard to Latin America, its institutions, the policies of its statesmen, and the opportunities for the investment of capital and the promotion of general trade.



(Photo by Fawcett.)

PAN AMERICAN COMMERCIAL CONFERENCE.

President Taft entering the Pan American Union Building to speak at the opening session of the Conference on Monday, February 13.

The moral forces of commerce, the pacific influence of trade, should be the foundation of the commercial policy of the representatives of the Western Hemisphere. The energies of production and consumption can not better be conserved than on such a basis. The diplomacy of commerce can not better be employed than in fertilizing and making productive the aspirations that within the last quarter of a century have germinated. From our own viewpoint, here on the northern continent, surveying the whole field of Latin American commerce, we are struck with an economic fact which must govern our mutual relations. The trade currents which flow between the United States and its Latin American neighbors should be north and south. The historic trade routes are along lines of latitude rather than longitude. There is profit for all of us in following the natural lines of least geographic resistance. In the trend

of trade on this hemisphere the temperate and the tropical regions are mutually dependent each on the other. We have abundance of raw material fabricated into finished products which our southern neighbors want. They have certain products which are essential elements in our food consumption. Some surplus food products we also have for them. This is a good basis for mutual exchange.

If I were to note the most marked development in our own commercial policy within the last few years as relates to our Latin-American neighbors, I should place first, not the general commercial exchange of commodities, though that is of great importance, but the awakening of our own people to the opportunities for the investment of capital. We have reached the stage in our own national development where our capital, never timorous when the opportunities are commensurate with the effort, looks to the south. What we did for the development of the mines and the railway system of Mexico, with abundantly satisfactory returns to ourselves and with equal advantage to our neighbors across the Rio Grande, we may further do in other countries not quite so near. The movement is perhaps a little slow, but it has set in, and with the exercise of that patience which is one of the temperamental characteristics of our Latin-American friends we may look for a much greater share in their development by capital from the United States than in the past.

We are interested in bettering the steamship communication. We believe that while its material advantages are great by the better and quicker facilities for mail and freight which such improvement will afford, there is an even greater advantage in the closer intercourse among the different peoples which it makes possible. We believe in the era of railroad construction which has set in and which is bearing such abundant fruits, and especially in that great intercontinental project with its enormous possibilities of good, the Pan American Railway. We believe, of course, in the Panama Canal, both as a commercial factor and as a moral force. We believe in the future development of those vast treasure beds of the Andes, the mines, and we hope to see much more of it done by our own capital. We believe in an international bank which will keep the commercial currents flowing in their proper direction. We believe in all these projects and we believe that the countries which have these resources to develop should be aided by capital from the United States and the United States should reap the legitimate fruits of such enterprise.

Secretary KNOX was followed by Señor Don JOAQUIN B. CALVO, Minister of Costa Rica.

Señor CALVO said:

Mr. PRESIDENT AND GENTLEMEN: It is most gratifying to note that, although this is not an official affair, Their Excellencies the President and the Secretary of State of the United States have honored this Conference with their presence and their words, showing in this, as on all opportune occasions, their earnest desire to promote the best understanding with all the other American Republics. I am sure that the sentiments that they have expressed will be highly and justly appreciated in the whole continent. Particularly speaking, permit me to convey to them the most sincere thanks in the name of the five Central American Republics.

Gentlemen, you have assembled here to discuss matters relative to commerce and the means to extend your able activities and to carry them beyond the national boundaries; you have expressed your desire to establish and maintain closer relations with the other countries of this hemisphere, and the Latin American Republics, inspired in the same friendly spirit, it is well known, readily respond to this call, as you do, to promote the great common interests of the American Continent.

For Central America in particular, I consider a blessing the proximity in which those countries lie, nature having located them in the center of this continent, around the encircled sea which gives us the advantages of being almost your riparians, with

the Pacific Ocean on the other side, and we know what this means in connection with the development of our countries.

It may interest you to know that the foreign commerce of Central America amounted last year to more than $50,000,000, detailed information to be given during the sessions of the Conference. These comparatively important figures show that the inauguration of the Panama Canal will not take us unprepared, and we hope that Central America will be largely benefited through the influence of that great undertaking in the general progress that it will bring to the commerce of the world. The completion of it is upon us, and we will welcome it not only from the commercial point of view, but particularly from that of its civilizing influences and more intimate relations with this great and noble nation.

Gentlemen, we thank you very much for your presence here, although we are same as you are, invited guests to this meeting. The Conference not being officially called, we neither had opportunity to vote any resolution whatever of the Governing Board of the Pan American Union in connection therewith.

As it has been already said, the foreign commerce of the five Republics of Central America amounted to more than $50,000,000 in the year 1909, last figures obtainable, each country contributing as follows:

| | 1909 | | | | |
|---|---|---|---|---|---|
| | Population. | Imports. | Exports | Total. | Per capita. |
| Costa Rica | 368,780 | $6,109,938 | $8,176,257 | $14,286,195 | 38.80 |
| Guatemala | 1,992,000 | 5,251,317 | 10,079,219 | 15,330,536 | 7.70 |
| Salvador | 1,707,000 | 4,176,931 | 6,401,349 | 10,578,280 | 6.19 |
| Nicaragua | 600,000 | 3,500,000 | 3,600,000 | 7,100,000 | 11.80 |
| Honduras | 745,000 | 2,581,553 | 1,990,601 | 4,572,154 | 6.13 |
| Total | 5,412,780 | 21,619,739 | 30,247,426 | 51,867,165 | 9.58 |

This total compared with that of 5,500,000 population shows a general per capita of $9.58.

The soil of Central America is one of the richest in the world. It abounds in minerals, forest products, and all other natural resources and is adaptable to almost any culture, as you all know, and its location between the two great Americas, bathed by the two great oceans, commands a position with no equal as a center for the universal commerce of the future.

The progress of those Republics, if retarded, is noticeable at the present time. Costa Rica, notwithstanding the calamities that befell her in the last two years, of uncommonly heavy rainy seasons and a severe earthquake, shows a per capita of $38.80. Costa Rica and Guatemala enjoy the benefits of interoceanic railroad communication, and with the others are making energetic endeavors to improve their means of communication by land and water. We expect very soon to see the main branch of the Pan American Railroad from the United States through Mexico connected with the railroad lines in Guatemala; and soon afterwards to see them connected also with those of El Salvador, which are being extended toward Honduras and Nicaragua, while prospects are the best to have Costa Rica, Nicaragua, and Panama united in the same way. The Costa Rican lines are extending toward north and south to those Republics.

Communication by water on the Atlantic side has been improved greatly through the service of the steamers of the United Fruit Company and at present is most satisfactory; but in the Pacific the monopoly continues to keep the same unsatisfactory conditions which have always existed. Salvador has no Atlantic ports, its territory lying in the Pacific between Guatemala and Honduras, almost touching that of Nica-

ragua. The connection of the Salvadorean with the Guatemalan lines, therefore, will give that industrious Republic direct communication with the Atlantic.

Particularly speaking of Costa Rica, my native country, nothing would be more gratifying than to mention the stability of its Government, the legal succession of one administration after the other, in such a regular way that we are proud to have 5 living ex-presidents among our noted citizens (Bernardo Soto, 1886–1890; José J. Rodriguez, 1890–1894; Rafael Iglesias, 1894–1902; Ascensión Esquivel, 1902–1906; Cleto Gonzalez Viquez, 1906–1910). These facts bespeak the character of the Costa Rican people, and their love of order and justice, while its foreign commerce attests to its industrious habits.

Costa Rica by selection of its sister Republics has the honor of being the seat of the first permanent international court of justice ever established on this continent.



(Photo by Fawcett.)

PAN AMERICAN COMMERCIAL CONFERENCE.

Senator Elihu Root on his way to address the morning session of the Conference on Friday, February 17.

Elisée Reclus, in his famous "Geographie Universelle," says that the people of Costa Rica present a certain originality from the ordinary Hispanic American communities; that the melting of its elements into one national unit has been accomplished there with better success than elsewhere. Felix Belly, a distinguished French traveler, among other well-known writers, says that the population of Costa Rica in its aggregate represents the highest plane of Christian civilization, as well as in all that touches the love of work and of the family; and that the whole Republic breathes a certain air of well-being, of honesty, and of goodness. And from a more intimate source I will have the pleasure of quoting the following from the report of the Central and South American Commissioners from the United States, 1885, to wit: "The name of Costa Rica stands high as a Republic, alive to the demands of a progressive, freedom-loving people; her institutions and her wealth, her industries and

improvements, bespeak a nation whose face is to the future, and whose enterprise will carry her to the high position her natural endowments and resources and advanced ideas demand."

Foreigners enjoy in Costa Rica the same civil rights as the natives, without the necessity of being admitted to citizenship or being compelled to pay any contribution thereon. They can carry on their business and manufactures, own real estate, buy and sell, navigate the rivers and coasts, exercise freely their religious creeds, marry, and dispose of their property by will.

In this connection it is to be noted that although comparatively the number of foreigners residing in Costa Rica and the amount of foreign capital—particularly American capital—invested there are larger than at any of the neighboring countries, Costa Rica has not at present, nor ever had at any time, claims presented against her for damages or injuries to those who have selected our country as their home or who came to our shores on business or to practice their professions.

In regard to currency, Costa Rica adopted and maintains very sucessfully the gold standard, has a solid banking system, and is in the way of very substantial improvements in its financial affairs.

The history of the Costa Rican commerce is a good illustration of the possibilities of the United States in Latin America. Formerly our trade was carried on chiefly with England, from the Pacific through the Strait of Magellan. Afterwards it went through the Panama Railway, but since communication by rail with the Atlantic was opened, conditions changed essentially. Notwithstanding that the Atlantic Railway belongs to an English company, our trade with the United States has increased from 1880 up to the present time to 57 per cent of its total amount. That is to say, that Costa Rica does more business with this country than with all the other nations combined. Last year we exported to the United States $4,802,254 and imported $3,376,350 of American goods—$8,178,606 out of the total amount of $14,286,195, the total Costa Rican commerce.

| | Imports. | Exports. | | Imports. | Exports. |
|---|---|---|---|---|---|
| United States | $3,376,350 | $4,802,254 | Other countries | $510,181 | $145,072 |
| Great Britain | 1,115,676 | 2,944,947 | | | |
| Germany | 802,234 | 166,686 | Total | 6,109,938 | 8,176,257 |
| France | 305,497 | 117,298 | | | |

All the above shows without question that Costa Rica presents, as already said, a good illustration of the possibilities for the business men of the United States in Latin America. Were Costa Rica a larger country, the facts I have briefly mentioned would be loudly spread everywhere.

As for details, they are to be found in the publications of the Pan American Union.

Señor Don IGNACIO CALDERON, Minister of Bolivia, was then introduced and said:

Mr. PRESIDENT—GENTLEMEN: "Your presence here is no ordinary event. It signifies much to the people of all America. It may signify much more in days to come."

Such were the prophetic words that the far-seeing statesman, JAMES G. BLAINE, uttered welcoming in this city the First Pan American Conference.

To-day on the eve of the fulfillment of that prophecy it is my privilege and special pleasure to welcome you here in this palace of peace dedicated to the brotherhood of all the American Republics through the concourse of all of them, and principally by the magnificent liberality of that noble philanthropist, ANDREW CARNEGIE, who so well knew how to use wealth in a democracy.



PAN AMERICAN COMMERCIAL CONFERENCE.

Group of delegates in attendance at the Pan American Commercial Conference, held in the new building of the Union, Washington, D. C., Feb. 13-18, 1911. At the sessions of this gathering were present over 600 leading commercial and trade experts and authorities, exporters, importers, manufacturers, besides many diplomatic and consular officers of Latin America.

I am compelled to acknowledge that the first years of the existence of this institution passed in a kind of what somebody might have called "inocuous desuetude"; the time was not ripe for it. The public opinion in this country was indifferent and South America was in bad odor, as the papers never printed any other news than that of revolutions and disorder, and made free use of some of the stock jokes about the armies with a hundred generals and one soldier, and so forth.

On the other hand, many malicious reports were spread in the southern Republics about the great "northern eagle," that was only a big bird of prey, ready to pounce and gobble up all the Republics in South America.

Under such circumstances it was natural that the cause of Pan Americanism should not progress, but in the summer of 1906, another great statesman went forth to South America with a message of peace and of friendship from the people and the Government of the United States to their Southern sister Republics.

How well Mr. Root fulfilled his noble mission is matter of history. His eloquent and sincere words were received in all good faith, and when at the meeting of the Third Pan American Conference in Rio he explained the position of this country in clear and forcible terms, no doubt was entertained about its meaning. He frankly declared: "We wish for no victories but that of peace, for no territory except our own; for no sovereignty except the sovereignty of ourselves," and after said: "We wish to increase our prosperity, to expand our trade, to grow in wealth, in wisdom, and in spirit, but our conception of the true way to accomplish this is not to pull down others and profit by their ruin, but to help all our friends to a common growth and prosperity, that we may become stronger and greater together." The policy of this great nation was clearly defined. And when he came back to this country he awakened public opinion as to the progress and development of the Southern Republics.

Since then the interest of this country in South America has been growing steadily under the wise impulse given to our good relations by the present administration and its able Secretary of State, and the work of propaganda by that apostle of Pan Americanism the Director General of this Union.

Speaking to an assemblage as intelligent as this I need not dwell on the great possibilities offered by South America, but I will say it is one of the greatest continents on the face of the earth. Stretching its length from the shore of the Gulf of Mexico down to the frigid regions of Cape Horn, South America with its area of over 7,700,000 square miles of territory offers to human industry and necessity every gift that bountiful nature could bestow.

Its grand and majestic mountains, its secular and imposing forests, its great rivers, such as the Amazon, that for over 3,000 miles can float the largest ships, are full of the most admirable panorama that is given man to contemplate.

Venezuela, Colombia, and Ecuador in the northern section are rich in every kind of tropical product, such as coffee, cocoa, nuts, rubber, etc., and its savannas are capable of maintaining millions of cattle. They are rich in various mineral products, asphalt lakes emerald mines, and pearl fisheries.

Farther south Peru produces great quantities of sugar, cotton, and alpaca wool, and has great petroleum fields. Chile owns the great nitrate fields which furnish the world's agricultural fertilizers. Its central valleys are rich in agricultural products, and its wine industry is being greatly developed, as is also sheep raising.

Farther south the Argentine Republic occupies already a commanding position in the world's trade as a great exporter of agricultural and animal products. Uruguay and Paraguay are also countries rich in the same kind of products.

Brazil, with its vast territory and great rivers, furnishes to-day the greater part of the coffee and rubber consumed in this and other countries.

Bolivia, my country, situated in the center of the continent, is the richest country in mineral wealth and has contributed for centuries millions of dollars worth of silver; besides, there are copper, zinc, bismuth, and gold mines. Tin is now one of the lead-

ing exports and furnishes at least one-fourth of the world's production, and should it cease in the few other places where it is now produced Bolivia could well supply the world with all the tin needed.

This great development of the southern countries is represented by over two thousand million dollars of their international trade.

This enormous sum is constantly growing as the construction of the railways is being pushed everywhere.

Brazil is extending its lines from north to south and from west to east, stretching them toward Uruguay and Paraguay.

The Argentine is gridironed with over 16,000 miles of railways, and new lines are being built in response to the need of its growing trade.

Chile is about to construct a line along its coast from north to south; it has also in connection with the Argentine completed the great tunnel under the Andes, that has put in close contact Buenos Aires and Santiago.

On the summit of the Andes stands that world-wide famous monument of CHRIST THE REDEEMER, the noblest expression of the sentiments for peace and fraternity in democratic America.

Bolivia is developing a carefully mapped railway system that is being carried out. One of its lines, going from north to south all through its high plateau will afford a continuous railway communication between La Paz and Buenos Aires. Other lines will be extended through the eastern section of the country to facilitate the exportation of the abundant rubber forests, rich pastures, and all kinds of tropical products.

Peru is extending its railway lines to the head waters of the Amazon in the north and bringing them down in the south to connect with the Bolivian system. And soon it may be possible to go by through trains from Lima on the Pacific coast to Buenos Aires on the Atlantic.

Ecuador has built a railway from Guayaquil, its main port on the Pacific, to Quito, the capital of the Republic, and other lines are in contemplation. The same work is going on in Colombia and Venezuela.

The great commercial progress of South America is represented by two thousand million dollars worth of exports and imports and out of this enormous amount the share of the United States is very reduced comparatively.

It is a painful fact that all through South America there are no American banking institutions, whereas you can find English, French, Italian, German, and Spanish banks in all the great capitals.

It is true that you have been too busy developing the resources of this magnificent country to bring it to the front rank as one of the greatest powers industrially, financially, and politically. You have been too busy creating multimillionaires by hundreds, but the time has come when the expansion of your financial and manufacturing resources demand new and enlarged markets.

The opening of the Panama Canal will make yet more important the development of the free commercial relations with both Americas. The completion of that stupendous work called to revolutionize the political and trade relations of the world will show how near neighbors we are and how close together are the countries of this hemisphere.

It would be presumptuous for me to say anything about the means and methods by which the commercial relations of our countries can be developed when I see here represented all the great commercial and industrial interests by men high in the management of business affairs.

This Congress will no doubt discuss and determine the best means to that end. I must say, though, that the mere buying and selling of products is not the whole aim of the nation's life. There are the great ideals, the sentiments that inspire and guide their conduct, that are more lasting and have much greater importance. In developing, consolidating, and strengthening the power of our Republics we must not




Photograph by Harris-Ewing.

HALL OF THE REPUBLICS PREPARED FOR THE COMMERCIAL CONFERENCE.

A number of large maps and diagrams were especially prepared for this conference and proved a most interesting and instructive feature in the discussions.

forget that we are consolidating and insuring for mankind those noble and elevating principles of democracy that stand for the uplifting of our race, for leaving open the road to success to every man with brains enough, right heart, and perseverance to forge his way; that we stand for the equality of man and to not recognize any other superiority or distinction but that which comes with a duty nobly performed, with the spirit of charity and justice in all actions.

Democracy in this American Continent means the absolute empire of right, of justice, and the development of every impulse that makes man nobler and purer.

Would that the flag of this great country, the beautiful Stars and Stripes, surrounded by the free flags of all the nations you see displayed in the corridor of this building, always wave over millions and millions of happy men, free, united in the common work of consolidating right and justice in the world, and bring one day the reign of that peace on earth proclaimed nineteen hundred years ago by angelic voices from heaven and so earnestly sought by every right-thinking man and woman in the world.

Señor Don Jaoquin d. Casasus, special ambassador of Mexico, was next introduced, and spoke as follows:

Mr. President, Gentlemen: It is to the happy initiative of that distinguished statesman, James G. Blaine, that we owe the conference of the American nations, which since 1889 have been held from time to time and which have been so productive of beneficial results and have brought us a rich and abundant harvest.

The natural and fruitful consequences of the arduous labor begun with such faith and carried out with such tenacity of purpose by the International Conferences of the American Nations are the following: A better knowledge of each other among these nations; the intelligent consideration of the different international problems that separate some relations while uniting others; frequency of communication, bringing with it closer relations; the ever-recurring endeavors showing the need of codification of international law; the stage of progress reached in making arbitration the only solution of international conflicts, and the part that all Latin America took in the Hague Conference, so that their important interests should be there represented for the first time.

When the first Pan American Conference was held in Washington a large number of European and American statesmen were of the opinion that its object was quite unattainable; that the plans laid out to reach the desired end were but a chimera and that it seemed impossible that such live forces should be directed to following a "will-o'-the-wisp," a mirage like those that the vast sandy plains of the desert present to the eyes of the tired traveler.

To-day we have to confess that those who held such opinions were in error; though it be true that the progress of nations can not be effected, unless there be in sight a more or less remote ideal, just as we can not comprehend life without the charm of some illusion, the mirage of some hope, so the aims which led the Government of America to meet together in frequent conferences, have been inspired by the conviction of their great needs and by the earnest desire to satisfy them in the most efficacious manner.

The Pan American Conferences have not had in view the suppression of those barriers which divide nations. That, indeed, would be a dream. They have never pretended to realize the political union of different American nationalities. That would be a wild flight of imagination. They have never thought of the possible constitution of a "Tolwering," which relegates the home interests of each nationality to oblivion; that would be an impossibility. But they have recognized that commercial ties are the closest bonds of a strong and lasting union. For that reason all their forces have been brought into play, inspired by a modern and practical spirit to facilitate the development of means of communication, to the building of solid foundations for international exchange and to the striving, because of a fuller knowledge

of their products and consumption, to obtain a more rapid increase of their wealth and greater benefits from the reciprocal exchange.

The union of the American Republics, thus conceived, was a symbol representing a tendency and therefore an ideal which demanded an effort for its realization; in other words, a purpose.

To-day, those who are more or less interested in Pan Americanism see that the symbol has taken shape, the shape most apt to become a living organism; that the ideal is an astonishing reality, that the purpose has been crowned by success.

The union of the American Republics dreamed of by BLAINE and created by the Conference of 1889, has acquired by a better organization greater stability—on the one hand, thanks to the intelligent initiative of ELIHU ROOT, in whom the practical spirit of the man of affairs unites so admirably with the prudence of the statesman, and on the other due to the resolutions approved by the Conferences of Rio de Janeiro and Buenos Aires.

The commercial progress of the nations of America among themselves, retarded, because of the enormous distances separating them, the vast extent of their territories, quite out of proportion with the number of their population, the vast riches lying in the soil unexpected and as yet not even explored, has an imperative need of an institution that by rapid communication may abolish distances, and by the kind of information scattered broadcast may make up in a way for the scarcity of population. An institution which, by the publication of reliable data, may make known the existence of those riches upon the exploitation of which depends the greatest welfare of nations, as well as the rapid progress of civilization.

The nations of Latin America, like most new countries, have but little capital. Teeming with possibilities like all rich countries, they need to make their products known and must offer complete security for the investment of foreign capital.

On the other hand, the United States, which has a glut of capital and seeks beyond its boundaries a manner of investing which may increase this capital, stands in need of reliable data giving accurate information in regard to opportunities of all kinds and guaranteeing the rapid increase of the capital invested.

For this reason the institution of the Pan American Union meets the exigencies of the present moment and is called upon to fill a want that the United States as well as all Latin America equally feels.

Commercial congresses, by which all practical men in America are brought together, commercial museums for the permanent exposition of manufacturers, products of the soil, and of the minerals hidden in the bowels of the earth, as well as all the wonders nature conceals, the wise dissemination of trustworthy data and correct information, all this will eventually do away with the obnoxious middleman, while facilitating more intimate knowledge of men of business and bankers who will bring the enormous capital needed for the development of Latin American wealth.

The Pan American Union is the institution best qualified to develop this scheme. Its first Commercial Congress is inaugurated to-day. Later on will come the opening of its commercial museum, and the organization of its agencies in all America. Through the medium of the BULLETIN an intelligent propaganda is carried on, placing before those interested the best information, so that capitalists may know where to invest their money safely, thus successfully filling the great object of the institution.

The Pan American Union, which exists to-day in a building worthy of the institution for its grandeur and beauty, will reach some day in the near future the acme of its success by the efficiency of its work and the important services rendered to the commerical relations of America.

The illusion of yesterday has become a beautiful reality. Over it now and ever hovers the ideal of the National Conferences of America; that is, the stability and progress of its commercial relations.

Ambassador CASASUS was followed by JAMES A. FARRELL, president of the United States steel corporation, who said:

Mr. PRESIDENT, LADIES AND GENTLEMEN: The International Union of American Republics, commonly called "The Pan American Union," its distinguished Board of Directors, and its competent, zealous, and efficient General Director, Mr. BARRETT, together with the Assistant Director, Mr. FRANCISCO J. YANES, are to be congratulated upon this great gathering of representative business men, interested in promoting trade and commerce between the countries comprising Latin America, and the United States.

As anyone who studies the progress of nations can perceive, the producing capacity of the United States has reached a point far exceeding the consumption, and the ratio of excess is assuming greater proportions each year. It is therefore imperative for the manufacturers of this country to look beyond its borders for markets wherein they can profitably dispose of their manufactures, and, naturally, our geographical position points to the vast country lying to the south of us as a market which should enable us to secure a portion of the trade commensurate to our position as one of the foremost producing nations.

The possibilities for the consumption of American products in the markets of our neighboring countries have long been realized by the greatest statesmen, as well as the leaders in the economic and commercial enterprises of our country. To everyone engaged in foreign commerce there comes a broader knowledge of human affairs and a better understanding of the relations of men and of nations and their relations to each other than comes to those who are solely engaged in domestic or local enterprises.

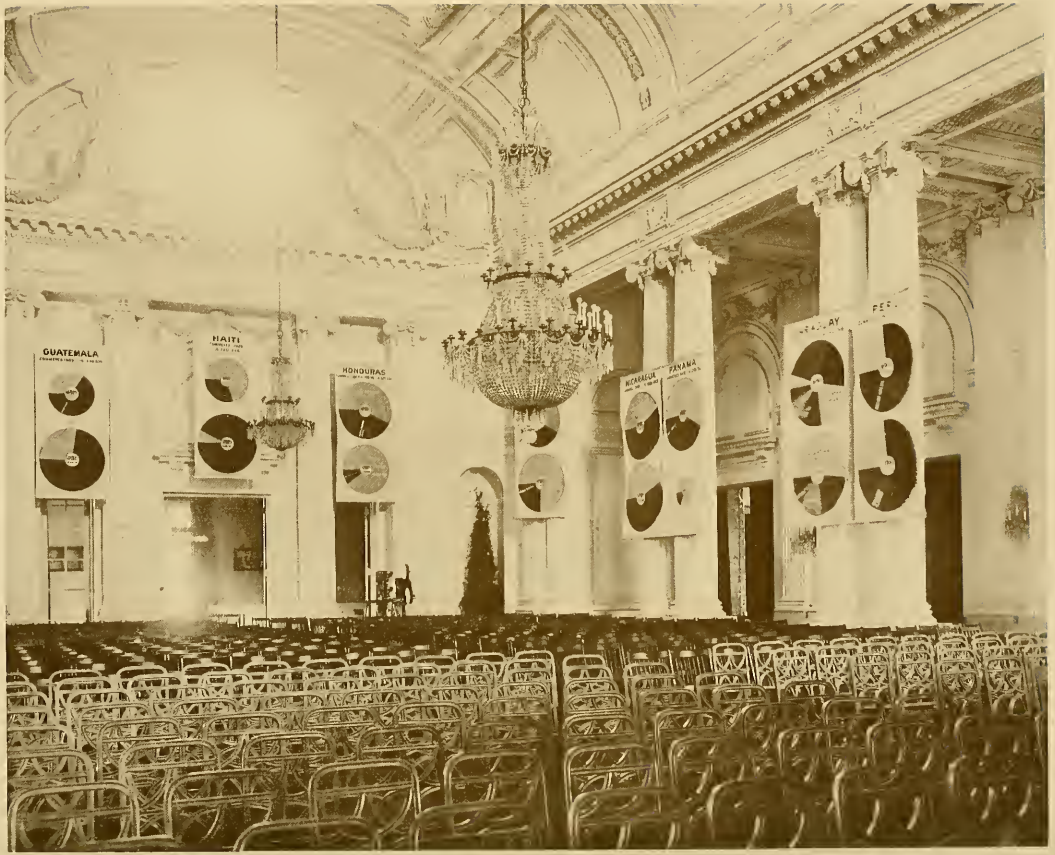
It has been the fashion to criticize American export methods indiscriminately; so also it has been the fashion to criticize the commercial methods of South American buyers. There are doubtless examples meriting criticism in both cases, but by observation, extending over many years in the export business and based on a direct personal acquaintance with the world's markets, enables me to state that, generally speaking, the products of our country and the manner in which they are packed for shipment are equal, if not in many cases superior, to the products and methods of European manufacturing countries.

The improvement which is constantly taking place in the quality and character of American manufactures is one of the reasons why our trade is constantly increasing. It is a fallacy to believe that quality does not count and that South America wants cheap goods. My experience is this, when our friends want railway materials, and a thousand and one other things, they are as well able to recognize quality and as competent to determine their necessities as we are.

The business methods of our friends to the south of us do not differ materially from ours, excepting that they are rather more conservative. It is more difficult to secure business connections there than in our country, but, once secured and mutual confidence established, it is of a permanent character.

The countries comprising what is commonly called "Latin America" should be drawn by a generous exchange of commodities through the peaceful channels of trade and commerce. As fair dealing is the only foundation upon which a sound and successful enterprise can be established, none but those of undoubted character and business ability should be sent to represent American industrial enterprises. In our relations with Latin America, this thought should be uppermost in the minds of those of our merchants who would seek a market in these countries. The patient cultivation of our trade will carry with it rewards of great mutual advantage.

Since the establishment of the Pan American Union, much has been accomplished to develop trade with those countries. Our neighbors have always found in the United States the greatest and best market for their products, statistics showing that we have given them more in trade than we have received; the reason for this being that, until




Photograph by Harris-Ewing.

HALL OF THE REPUBLICS DURING COMMERCIAL CONFERENCE.

Diagrams showing the export and import trade, for the year 1910, of each of the American Republics with the rest of the world.

comparatively recent years, we, as a nation, have been largely interested in the internal development of our natural resources, and have given little thought to the development of foreign trade, except as our requirements or necessities impelled us.

The growth of our country's trade with the Latin-American Republics furnishes a striking example of what can be accomplished by commercial friendship and cooperation. It is beyond the scope of this address to do more than briefly outline the nature and value of the trade between us.

The establishment of American banking facilities and American steamship lines are incidental matters which will evolve in the course of time.

The completion of the Panama Canal will give a wonderful impetus to Pan American trade. It is impossible, at this time, to fully estimate the benefits that will accrue to the manufacturing and industrial interests of the United States and Latin America. We are justified in believing that it will undoubtedly prove one of the most profitable investments ever made by our Government, aside from its being a national necessity.

The United States Government statistical reports for the calendar year 1910, recently published by the Department of Commerce and Labor, show that our trade with the countries embraced in the Pan American Union, in round figures, were as follows:

| | |
|---|---|
| Imports | $394,000,000 |
| Exports | 260,000,000 |
| Balance against United States | 134,000,000 |

This adverse balance is largely accounted for by the figures of our commerce with Brazil, which were, in round numbers:

| | |
|---|---|
| Imports | $103,000,000 |
| Exports | 25,000,000 |
| Balance against United States | 78,000,000 |

While I have not at hand the latest statistics of the total amount of the trade of other countries with those embraced in Pan American Union, it will be interesting, to note the comparison of the figures for steel products alone, for which class of trade reasonably close approximations are obtainable. The comparison is as follows:

In 1910, the manufacturers of the United States exported to the Pan American Union, steel products of an aggregate value of $21,000,000, as against a total of $35,000,000 exported by European manufacturers to the same countries.

We are a great manufacturing nation, and as such it is only reasonable for us to look to our neighbors for fair exchange of our commodities in return for those we obtain from them. Up to within recent years a large percentage of our country's exports came to our manufacturers without any particular effort, but in late years it has been necessary for our manufacturers to study foreign markets. To be successful our manufacturers must have a fuller knowledge of their requirements and keep in closer touch with their customers. Such contact places them in a more intelligent position respecting our resources and products, and promotes an intercourse which is mutually beneficial. System, purpose, and organization are the only things that count in the long run.

The delusion exists that the trade of the United States with foreign countries is carried on within narrow limits, among others the claim being made that we do not extend credits, and in consequence a large volume of trade goes to Europe which would come here were we to grant credits of six to nine months. In the great majority of cases credits such as referred to are granted only against acceptance of drafts, with interest added for the accommodation, but the bulk of the business done with the best buyers, wherever found, is either against bank credit, or cash against shipping docu-

ments. Wherever there is a *basis* for credit, American manufacturers will be found as ready to grant it as Europeans.

It is only within the past few years that we have had direct lines of communication from the United States to many South American ports. The growth and development of trade and commerce between the United States and the countries of Latin America has now been increased to such proportions that there are frequent sailings between ports of the United States, on the Atlantic and Gulf coasts, direct to the ports of Latin America, on both the east and west coasts.

In the development of our trade we should endeavor to obtain our full share of business by fair and honorable means and with due regard to the rights of those with whom we are trading. The saying, "Competition is the life of trade" is a truism to which daily utterance is given. Were this changed to "*Fair* competition is the life of trade," it would more correctly represent the basis upon which sound and lasting business relations may be established.

If we investigate the commercial and economic history of the countries that have made the greatest strides in ancient and modern times, we will find that their Governments and statesmen have given their best thought, energy, and support to foster and protect their interest at home and to seek markets abroad.

The Pan American Union is performing a great work for the advancement of trade, commerce, peace, and civilization, and it is to be hoped that the respective Governments will continue to support the movement so that a lasting goodwill may be established through the peaceful contests fought out in the channels of trade and commerce.

This occasion should not be allowed to pass without a word of congratulation to the commercial world, and more particularly our distinguished President and Secretary of State, on the decisive and effective position taken and held during recent years toward the perfection of our diplomatic and consular organization. The commercial world is watching our consular service and the efforts of the Government to keep this most important branch of our foreign representation on a merit and business basis.

Our consular service has grown and developed in recent years under the present policy of the Government, so as to merit the confidence of our citizens at home and abroad. We should not forget that this service remains the one organized expression of our country in its stupendous contests which are now engaging the nations of the earth in competition.

The commercial interest of the United States should guard it jealously and support and fortify in every possible manner the splendid work of Secretary KNOX and Director CARR in their efforts to maintain and improve this branch of the Government service.

The Department of Commerce and Labor has also in recent years achieved splendid results by sending special agents throughout the world to report on business and economic conditions with a view to the promotion of our country's trade and commerce with foreign countries.

As a business proposition alone the emoluments of every consulate on the list where conditions recommend its continuance should be markedly advanced. Our consular service is highly efficient and no just criticism can be made of it, but men tire of working for glory alone. The service should be fixed by statute on a permanent basis and salaries paid commensurate with the importance of the work and the pretensions of our country.

I am one who believes the American consular service is the best in the world. I have met many consular officers and I have invariably found them interested in their work and appreciative of the significance of American commerce.

In this connection the thought is suggested how the consular organization might be used in a direct manner for the dissemination of information concerning American manufactures and exports in a wise and comprehensive way. This could be done by establishing a consular trade bulletin to be published by the Government in several

different editions and in different foreign languages, printing the standard American exports with specimen prices and other information indicated by bills of lading and invoices at the point of shipment.

Such publication being of a statistical character and bearing the imprint of the United States Government would be received without prejudice in every market of the world.

Hon. CHAMP CLARK, Member of Congress from Missouri, was the next speaker and said:

MR. CHAIRMAN AND LADIES AND GENTLEMEN: You came very near being deprived of my society this evening on account of the great debate that is now raging in the House of Representatives on the Canadian reciprocity bill. That is a document that President TAFT and myself sort of own in partnership. We went into Committee of the Whole on the state of the Union to discuss it, by a vote of 195 to 131, which I suppose is really about a test vote.

I am going to speak for myself now and not for President TAFT or for anybody else. I am in favor of reciprocity, not only with Canada, but with all the South and Central American Republics. In fact, I am in favor of reciprocity with all the nations of the earth. When I am making a stump speech—which I am not doing this afternoon—I define reciprocity this way: You tickle me and I'll tickle you. You trade with me and I will trade with you. And I do not believe that honest trade ever hurt anybody or any nation.

I am not going to try to rival these distinguished orators who have preceded me, because I have not had any time to take away from that debate up there. I see the way you have got this programme arranged, though. You have President TAFT for the last, which is on the principle, I suppose, that at the feasts they have the best wine last. SHAKESPEARE says:

> "To gild refined gold, to paint the lily,
> To throw a perfume on the violet,
> To smooth the ice, or add another hue
> Unto the rainbow, or with taper light
> To seek the beauteous eye of heaven to garnish,
> Is wasteful and ridiculous excess."

And I really think that to make a speech, considering those who have gone before and the distinguished gentleman who is to follow, is also "ridiculous and wasteful excess."

On the 4th day of March, 1801, THOMAS JEFFERSON delivered an inaugural which has become a classic and which, if I had my way about it, every boy and girl in the United States should commit to memory as a literary exercise because, among his other excellences, he wrote the best English of any man that ever set foot on the North American continent. In that inaugural he laid down certain principles on which this Government ought to be conducted, and among other things he declared in favor of "peace, commerce, and honest friendship with all nations, entangling alliances with none;" and that has been the mainspring of the action of this Republic toward all other nations from that day until this. He was the greatest philosopher that ever devoted his life to politics, and my judgment about it is that if he had not been drawn by stress of circumstances into politics he would have devoted his life to philosophy and would have ranked in that great field of human endeavor with Sir ISAAC NEWTON, the discoverer of the law of gravitation, with LORD BACON, the father of inductive philosophy, with BENJAMIN FRANKLIN, the great American philosopher.

There are two universally admitted standards of human progress. There are a great many other standards, about which there is some dispute; but the two there is

no sort of dispute about are increase of population and increase of wealth and if the population of the Western Hemisphere and the total wealth of the Western Hemisphere increase in the next 110 years at the rate that they have in the last 110 years, in the year 2020 one-half of all the people on the earth's surface will live in the Western Hemisphere and one-half of all the wealth will be in the Western Hemisphere. So, we are pioneers here to-day in the great effort to get together and to help each other. True, it is a commercial enterprise; the establishment of the Bureau of the Pan American Republics was a great performance; the selection of my friend, the Hon. JOHN BARRETT, as Director General of that Union was another great performance. I take a good deal of stock in BARRETT. The change in the name from The Bureau of American Republics to The Pan American Union was a fortunate incident.

There is no politics in this meeting, either national or international. You gentlemen are here to devise ways and means to increase the trade between these countries, and the statesmen and politicians, whichever you please to call us, always remembering the Hon. THOMAS B. REED'S celebrated saying that "a statesman is a successful politician who is dead." But I get a good deal of satisfaction even out of that declaration, because, reading history, I note that some of us who are now denounced and talked about as mere politicians, by succeeding generations will be ranked as statesmen. Now, just exactly which of us that is going to happen to I do not know, but politicians, or statesmen, whichever you please to term us, are here to give you encouragement, to help along. We do not know as much about exports and imports and manufactures as Mr. FARRELL, the president of the United States Steel Corporation, who has just addressed you, and as a good many of you do, but we have a general idea about it, and we are willing to help; and if we can not do anything else, we are willing to encourage you by our presence.

When I was a boy, back in the hill country of Kentucky, I knew an old, rough-and-ready country doctor who said that "the most sensitive nerve in the human anatomy is the nerve leading to the pocketbook"; and I believe that is true, and I believe that a vast amount of good comes out of this Bureau and its efforts to get together closer commercially, and every movement of this kind is for the benefit of the human race, and I believe that this Union and the Hague Peace Tribune will finally put an end to war among civilized nations; and that is another thing most worthy of striving for.

President WILLIAM H. TAFT spoke as follows:

LADIES AND GENTLEMEN: I came here to listen and not to talk, but there are some things that force themselves on a man's intelligence in a significant meeting like this. This meeting and many which are to follow mark the wisdom and the benefit of the generosity which made such a building as this possible. We are all affected by externals, and when one comes into a hall like this, as I did the other day, and found it unoccupied, one can not help suggesting to Mr. BARRETT, as I did, that there are a great many uses that its ownership tempted. I will not go into the list of things that I thought might be done with it, because they might seem flippant and hardly dignified as compared to the use to which the hall is now being put. But there is a great deal in giving to the Pan American Union a local habitation, dignified and beautiful as this is, and offering every accommodation for a convention of gentlemen who would rather meet in an artistic building and a comfortable building, like this, than in a theater or some other cold place that does not suggest union or harmony or anything else—in the daytime, at least.

The object of this meeting, as I understand, is commercial. It is to give to those who take part information as to the best means of promoting the commercial relations and increasing the commerce between the United States and the other members of the Latin-American Union. I listened with a great deal of interest to Mr. FARRELL'S paper—listened with interest to the statement made by him that the criticisms which

I had heard made of American merchants and manufacturers were not justified. I had understood—and I rather thought there was something to it—it may be that American manufacturers are getting over it now—that they felt so much pleased with their work and were so confident of being able to live without going outside of America and the United States, that they did not fit their products to the tastes and desires of other countries, and that they said that if other countries did not like our goods they could be sold at home, and so were not troubled about it.

We are changing from a country that raises agricultural products and exports them to the world to a country that in the near future, unless our production of agriculture increases, will become a food-consuming country, and will depend upon our manufactures for our export trade. When we reach that point, I hope that the American ingenuity and the American desire to succeed in trade will fit our products so that they will attract those to whom we wish to sell more than the products of the other nations will attract those same people. I have confidence in our business ingenuity and business enterprise and business industry to believe that when we are face to face with the facts we can meet them; and I think it would be wise for us to anticipate that time and learn, as such a meeting as this will teach, of the things that those desire who live in the other countries with whom we foster commercial relations, because it is the purchaser that has the option to say what he wishes to buy; it is not for the manufacturer to say what he wishes to sell, that is, if the manufacturer desires to go into the selling business at all.

It is true we ought to have banks in South America, and we ought to have lines of steamships carrying our freight. Just how we are going to get those two things, some of us differ. The last speaker and I have gotten together on one plank of a platform. We are both rather heavy men, and I hope it will support us. But I do not know how many other planks will. It is a great pleasure to be with him in the promotion of trade in any part of the world. He is in favor of reciprocity agreements with all parts of the world, and so am I. But that does not help very much to a definite agreement of reciprocity in the case of any one nation upon which we can agree. We will all vote for honesty and bravery and courage and all the other virtues with unanimity, and we will vote for wise measures so characterized in favor of commerce, but when it comes to determine what those wise measures are or what measures are wise, then is the difficulty. But Mr. CLARK and I, in anticipation of his coming to be the head of the great popular branch of the legislature, have at least got together on one very important matter, and I hope we can carry it through.

Commercial relations form the subject of this meeting. The relations of peace, the political relations between the countries, are not under its especial consideration, but it is undoubtedly true that the promotion of commercial relations necessarily brings about closer political and closer social relations between nations, and makes much less likely the hostility and the hard feelings that are likely to lead to war. It may be that the promotion of such relations as a means of promoting peace is through that nerve of the pocket to which Mr. CLARK referred, but that does not make any difference. Any means of promoting peace that is consistent with honor and principle, we ought to promote, and promote gladly.

The union of the Latin-American Republics has in very recent years shown the possibility of bringing to bear upon countries that were disposed to resort to war the effect of the public opinion—international public opinion—of 21 countries united for the purpose of keeping the peace. And I have no doubt that as our commercial relations become closer, as the method through The Hague Tribunal and by direct negotiation for the prevention of war becomes better understood, the union in this hemisphere of all these countries will be an example to the entire world of what can be done by international union for the purpose of promoting peace.

On Friday, February 17, 1911, Hon. ELIHU ROOT, Senator from New York, delivered the following address:

Mr. CHAIRMAN, LADIES AND GENTLEMEN: I have not come to deliver an address or to make a speech, but simply to show my good will and sympathy with the movement in which you are engaged, and to express my regret that the rather pressing occupation of the last weeks of a short session has made it impossible for me to be here at an earlier time and to spend more time with you. You are the real thing.

Governments may hold doors open all over the world, but if there is no one to go through them it is an empty form, and people get tired of holding doors open as an empty form. The claims of a Government to consideration soon come to be regarded as pretentions unless there are really substantial interests behind the claims. No Government, and least of all our Government, least of all a democratic Republic, can make commerce to go through open doors, to avail itself of fair and equal treatment, and to give substance and reality to the theoretical increase of amity and friendship between nations. The people of the country must do it themselves, and they must do it by individual enterprise; they must do it by turning their attention toward the opportunities that are afforded by friendly Governments, by availing themselves of those opportunities, and by carrying on their business through availing themselves then. But while it is a matter of individual enterprise, while that must be the basis of all development and progress, all advance, all extension, nevertheless, there must be something besides the individual enterprise. The great principle of organization which is revolutionizing the business and the social enterprise of the world, applies here as it applies elsewhere. No single business can make very much advance except as all other business of the country makes advance. No one can go into a new field very far in advance of others; and the way for each man to make his business successful in a new field is to do his share as a member of the community, as a citizen of his country, as one of the great business organizations of his country, to advance the trade, the commerce, the influence of his country as a whole in the field into which he wishes to enter. A recognition of the dependence of each man's business for its prosperity and progress upon the prosperity and progress of the business of all is necessary in order that there be real progress. Now, there are Governments who undertake actively to lead in this direction, and they are Governments who are making enormous progress. Germany, a country regarding which Mr. WHITE has just spoken in such apt and appropriate terms, leads, and to a considerable extent in various directions, it requires the combination of her manufacturers, her producers, and her commercial concerns. Japan practically does also. There is solidarity brought about by the wonderful organization of that combination; so that it is one for all, and all for one, under Government leadership. We can not do it here. Our country can not take that kind of lead. Our people do not conceive of that as a function of government, and as far as the activities of our Government are concerned they are largely engaged in breaking up organizations which do increase the industrial efficiency of our country. I do not want to be understood as criticizing that. It is all right to break them up when they are taking too great a portion of the field for themselves. It is all right and important to break them up when they are monopolizing the means of subsistence that should be spread throughout the great body of the people. But we must recognize the fact that when our Government does enforce the law—a just law, wise law—against our great commercial and our great industrial organizations, it reduces the industrial efficiency of the country. There is only one way to counteract that effect, not violating any law, but securing through organization the united action, and concentrated action of great numbers of Americans who have a common purpose, substituting that kind of organization for the organizations which it is the duty of our Government to break up, because they are contrary to our laws.

I am much gratified by this meeting and by the association of so many practical men, business men, who, by uniting, are really creating a new force in this direction, upon which I am sure we ought to move.

Let me say one thing about the practical direction of your efforts. The so-called ship subsidy bill has been reduced now to nothing but the proposition that the Government should be authorized to pay adequate compensation to secure the carriage of the mails, to pay out of the profits of the ocean mail service adequate compensation to procure the carriage of the mails by American steamers to South America; that is what it has come down to. It passed the Senate, as Mr. White has said, only by the casting of the vote of the Vice President, and I do not know what will be done with it in the House. I am afraid in these last days that it may be lost in the shuffle.

There are two reasons why that perfectly simple and reasonable proposition failed to carry a great majority of the Senate, and fails—if it does fail—to be certain of passing the House. One is because there is a difference between the people who want to have the thing accomplished about the way in which it should be accomplished. That is one of the most common things in the world. A certain set of men who want to have a revival of our merchant marine say the way to do it is to pay subsidies, the way to do it is to equalize the differences between the cost of maintaining and running an American ship and the cost of maintaining and running a foreign ship, and to equalize the subsidies paid by practically all the other great commercial nations to their steamship lines. Another set of men who equally desire to restore our merchant marine say that is not the right way; the right way is to throw open the doors and enable our people to buy their ships abroad; but still others say the true way is to authorize our ships to employ crews and officers of the low-priced men of the world, relieve them from the obligations that are imposed upon them in respect of the employment of Americans, people of the United States, who will require the high standard of living that has been produced in the United States by the operation of our protective system, relieve them from the obligations which are imposed upon them by our laws in regard to the requirements of the crew and air space, the food, and the treatment that a crew is to receive, so that it will be cheaper to run an American ship. Now, between these different sets of people, having different ideas of the way to accomplish a thing, nothing is done; and that situation which exists so frequently regarding so many measures will exist forever unless there is put behind the proposition a force that gives it a momentum to carry it over such obstacles; put force enough behind it so that the gentlemen in the Senate and House of Representatives understand that they are going to be held responsible by the American people, going to be held responsible for not doing the thing, for not finding out some way to do it, and they will come to this sensible conclusion very shortly, and that is:

"We will settle the controversy about the way it should be done by trying one thing first, and if that don't work we will try the other."

Another difficulty about this measure is that there is a difference in appreciation of its importance in different parts of the country. Down here on the seaboard I think most people do appreciate it. You appreciate it; all the people who are concerned, or wish to be concerned, in South American trade, or trade of the Orient, appreciate it; but you go back into the interior of the country, into the great agricultural States of the Northwest, and the farther Middle West, States along in the Valley of the Mississippi and the Missouri, and the people there are thinking about other things, and they have a natural dislike for subsidies, and when told that a measure means giving somebody else something for nothing they express and impress upon their Representatives a great dislike for it. The way for us to get something done is not for us who are in favor of it to talk to each other about it. We can do that indefinitely without getting much further. The way is to take steps to bring to the minds of the people of the Valley of the Missouri and the Northwest, bring to the minds of the people and

those great agricultural States the importance to them, as well as to us, of having our merchant marine restored.

I noticed here the other day that the people of San Francisco were justifying their confidence in themselves by procuring all their business correspondents in the State of New York to write letters to me in favor of having the great "Exposition and Celebration of the Opening of the Canal in San Francisco;" and these letters came in by the thousand from my constituents. They became so tiresome that I came very near voting against the project as a measure of revenge, but it showed the San Francisco people understood where to go in order to preach their doctrine. They did not talk to each other on the Pacific coast about it. They came to New York and got their business correspondents interested in it and got them to talk to their Representatives about it. That is what you want to do in Kansas and Nebraska and Iowa and the Dakotas—you want, through all the relations that you have, and by every means in your power, to represent to the people of those great interior States, who have but little direct relation with the ocean commerce of the world, the real conditions under which we exist, and the importance to the whole country of doing something; and if they do come to appreciate the importance to the country of doing what you are talking about, then they will be for it, for they are sincere, patriotic Americans.

There is but one thing more I want to say regarding the relations which underlie the success of such an enterprise as you are now engaged in. Of course, you have had a great amount of advice and a great many speakers have told you a great many things you know, and I am going to put myself in line with the distinguished gentlemen who have preceded me by doing the same thing. At the basis of all intercourse, commercial as well as social, necessarily lies a genuine good understanding. That can not be simulated; the pretense of it is in general in the long run futile. People trade with those with whom they have sympathy; they tend to trade with their friends. The basis of all permanent commercial intercourse is benefit to both parties—not that cutthroat relation which may exist between enemies, where one is trying to do the other—and a relation upon mutual respect, good understanding, sympathy, and friendship [applause], and the way to reach the condition which is thus essential is by personal intercourse and acquaintance between the men of Anglo-Saxon or German or Norse, or whatever race they may be, peopling the United States, and the men of the Latin-American race peopling the countries of the South. This is something, my friends, in which our people are very deficient. So long we have been separated from the other nations of the earth that one of our faults is a failure to appreciate the qualities of the people who are unlike us. I have often had occasion to quote something that BRET HARTE said about the people of a frontier western camp, to whom came a stranger who was regarded by them as having the defective moral quality of being a "foreigner." Difference from us does not involve inferiority to us. It may involve our inferiority to somebody else. The sooner our business men open their minds to the idea that the peoples of other countries, different races and speaking different languages and with different customs and laws, are quite our equals, worthy of our respect, worthy of our esteem, regard, and affection, the sooner we shall reach a basis on which we can advance our commerce all over the world. A little more modesty is a good thing for us occasionally; a little appreciation of the good qualities of others—and let me tell you that nowhere on earth are there more noble, admirable, and lovable qualities to be found among men than you will find among the people of Latin America.

Gentlemen, I beg your pardon for keeping you so long as the result of these remarks; I wish you godspeed in your efforts. I hope for you the effectiveness of a great and permanent organization and that you may advance the time when through more perfect knowledge, through broader sympathies and a better understanding, ties of commerce may bind together all our countries, advance our wealth and prosperity

and well-being with equal step as they advance the wealth and prosperity and well-being of all those with whom we deal, and advance the tie of that perfect understanding of other peoples which is the condition of unbroken and permanent peace.

The hard practical work of the conference commenced with the morning session of Tuesday, February 14, and continued through the afternoon of Friday, February 17. During these sessions the discussions were led by the following authorities and experts on Latin American trade and commerce, in which nearly all the delegates participated either by additional remarks or questions asked the speakers.

The speakers at the various sessions were as follows:

### Opening Session.

*Monday afternoon, February 13, 1911.*—The President of the United States; Hon. Philander C. Knox, Secretary of State of the United States; Hon. Joaquin B. Calvo, Minister of Costa Rica; Hon. Ignacio Calderon, Minister of Bolivia; Hon. Joaquin D. Casasus, former Ambassador of Mexico; Hon. Champ Clark, Speaker-elect of the House of Representatives; Mr. James A. Farrell, president of the United States Steel Corporation.

The opening session began at 3.30 o'clock, the speakers being introduced by the Director General of the Pan American Union, Mr. John Barrett.

*Monday 8 p. m.*—Dr. Alberto M. Carreño, secretary of Mexican special embassy to United States, delivered an address upon Mexico; Dr. Albert Hale, of the Pan American Union staff, gave an illustrated travel talk on Latin America.

*Tuesday, February 14 (morning, 9.55 to 12.35—Afternoon, 2.15 to 5).*—Tuesday's sessions included a general discussion of the Pan American field: Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Salvador Uruguay, Venezuela, and the United States.

The discussions were led by the diplomatic representatives of Latin America in Washington, other governmental authorities, and trade experts, including Felipe Pardo, Minister of Peru; Dr. Don Rafael Arízaga, Minister of Ecuador; Dr. Salvador Castrillo, Minister of Nicaragua, paper read by J. M. Lacalle, of the Pan American Union staff; Jacinto L. Villegas, Chargé d'Affaires of Argentina, paper read by Dr. Albert Hale, of the Pan American Union staff; H. Pauleus Sannon, Minister of Haiti, paper read by Capt. G. R. Fortesque, of the Pan American Union staff; P. Ezequiel Rojas, Minister of Venezuela, paper read by Assistant Director of Pan American Union, Francisco J. Yánes; Isaac A. Manning, United States Consul at La Guaira, Venezuela; J. P. Santamarina, of Buenos Aires, special correspondent of La Razon; Lewis Nixon, delegate of the United States to the Fourth Pan American Conference, at Buenos Aires; Lorenzo Daniels, of the Lamport & Holt Steamship Line, expert on shipping; A. G. Robinson, special correspondent of the New York Sun, expert on Cuba.

Others who participated in the discussions included Franklin Adams, Chief Clerk and Editor of the Bulletin of the Pan American Union; Capt. G. R. Fortescue, W. C. Wells, Dr. Albert Hale, and W. B. Montgomery, of the Pan American Union staff; S. Krausz, S. Gumpert, Francis B. Purdie, Forbes Lindsay, P. R. Clark, Frank D. La Lanne, Mr. Easton, Edward A. Deeds, Joseph H. Appel, H. P. Stratton, Phanor J. Eder, T. C. Clifford, Louis Raposo, John Vavasour Noel, Reginald Gorham, C. L. Coffin, F. C. Enright, D. Lindemay, J. E. Barbosa, A. H. Keleher, H. F. Temple, Paul R. Mahony, J. D. Massey, J. N. Kise, William S. Cox.

*Tuesday, 5.15 p. m.*—The delegates were given a reception by the Commercial Club of Washington, at 21 Lafayette Square.

*Tuesday 8 p. m.*—Mrs. Harriet Chalmers Adams, the distinguished woman traveler, gave an illustrated lecture on Latin America.

*Wednesday, February 15 (morning, 9.50 to 12.30—Afternoon, 2.35 to 5.45).*—Wednesday's discussions were devoted principally to special features of Pan American commerce and the Panama Canal. The speakers included Dr. Belisario Porras, minister of Panama; paper read by Dr. Albert Hale, of the Pan American Union staff; Alfredo de Castro, Chargé d'Affaires of Uruguay; Huntington Wilson, Assistant Secretary of State of the United States; Francisco Garcia Pereira Leão, Brazilian Vice Consul, New York; John B. Osborne, Chief of Bureau of Trade Relations, State Department; Francisco de P. Borda, Minister of Colombia, paper read by Phanor J. Eder; Prof. W. R. Shepherd, Columbia University, secretary of United States delegation to Fourth Pan American Conference; Bernard N. Baker, of Baltimore, authority on shipping; Franklin Johnston, editor of American Exporter, New York; Right Rev. Lucien Lee Kinsolving, of the Brazilian Episcopal Church; Louis Raposo, correspondent, expert on Brazil; Atherton Brownell, of Brazilian Propaganda, expert on Brazil; M. de Moreira, editor of Foreign Trade, expert on Brazil; Jose Richling, Consul General of Uruguay, New York; Alfredo Metz Green, Consul of Uruguay, New York; Francis B. Loomis, expert on the Pan American Railway; César A. Barranco, Vice Consul of Cuba in Washington.

Those who participated in the discussions were Charles A. Pope, Isaac A. Manning, John A. Olt, L. A. Kimball, A. H. Keleher, C. L. Coffin, Philip J. Forbes, P. R. Clark, S. Krausz, Forbes Lindsay, Leonard S. Smith, Alberto Yoacham, Chargé d'Affaires of Chile; Marsh Parsons, Mr. Anderson, George L. King, John Vavasour Noel, Louis S. Curt, Charles E. Hildreth, Jose McMenendez, J. P. Santamarina, D. Lindemay, Dr. A. Diaz Guerra, Caswell A. Mayo, Phanor J. Eder, E. F. Wickwire, Frank X. Kreitler, Mahlon C. Martin, Jr.; S. Gumpert, Charles L. Chandler, J. D. Massey, Paul R. Mahony, John K. Broderick, Dr. Albert Hale.

*Wednesday, 1 p. m.*—The delegates were given a luncheon at the New Ebbitt House by the Washington Chamber of Commerce and Board of Trade. Hon. Henry B. F. Macfarland, former president of the Board of Commissioners of the District of Columbia, delivered an address of welcome at the luncheon.

*Wednesday 8 p. m.*—D. M. Hazlett, of the Latin American and Foreign Trade Association, St. Louis, delivered an illustrated lecture upon Brazil, filling the place of Prof. Hiram W. Bingham, of Yale University, who was to have lectured Wednesday evening, but was taken suddenly ill.

*Thursday, February 16 (morning, 9.35 to 12.35—Afternoon, 2.30 to 5).*—Thursday's sessions were devoted to a continuation of discussion of Pan American commerce and the Panama Canal. The speakers were Julius G. Lay, United States Consul General at Rio de Janeiro; A. H. Baldwin, Chief of Bureau of Manufactures, Department of Commerce and Labor; C. R. Donaldson, of the Bureau of Manufactures, Department of Commerce and Labor; Charles M. Pepper, of the Bureau of Trade Relations, State Department; Alberto Yoacham, Chargé d'Affaires of Chile; Henry L. Janes, of Division of Latin American Affairs, State Department; Francisco J. Yánes, Assistant Director of the Pan American Union; J. P. Santamarina, special correspondent of La Razon; Charles L. Chandler, United States Vice Consul General, Buenos Aires; W. A. Graham Clark, expert to Tariff Board on Latin American market for textiles; Dr. W. P. Wilson, Director of Philadelphia Commercial Museum; C. A. Green, of R. G. Dun & Co., expert on credits; James W. Porch, of New Orleans, expert on the Panama Canal; John F. Fowler, of W. R. Grace & Co., expert on export and import trade; William M. Bunker, of the San Francisco, California, Chamber of Commerce, expert on the Panama Canal; Marcos J. Trazivuk, of

the Ward Steamship Line, expert on packing; F. C. ENRIGHT, of the Chicago Association of Commerce; A. H. KELEHER, of the Holophane Glass Company, expert on Uruguay; DUDLEY BARTLETT, of the Philadelphia Commercial Museum; Right Rev. LUCIEN LEE KINSOLVING, of the Brazilian Episcopal Church; O. P. AUSTIN, Chief of the Bureau of Statistics, Department of Commerce and Labor.

Others who took part in the discussions included D. LINDEMAY, C. L. COFFIN, JOHN VAVASOUR NOEL, FRANCIS J. LOWE, JOSE MCMENENDEZ, FORBES LINDSAY, CHARLES J. MARSH, W. J. H. NOURSE, ISAAC A. MANNING, W. C. WELLS, of the Pan American Union staff; Dr. FRANK R. RUTTER, of the Bureau of Manufactures, Department of Commerce and Labor; E. F. WICKWIRE, P. N. HYDE, HARRISON C. LEWIS, JOSEPH F. GRAY, CHARLES H. DANKEMEYER, A. B. FARQUHAR, S. GUMPERT, S. KRAUSZ, FRANCIS B. PURDIE, REGINALD GORHAM, PIERCE G. WILLIAMS, Mr. BLOOD, J. F. FOWLER, WILLIAM T. WEST, E. FEIGE.

*Thursday 8 p. m.*—Miss ANNIE S. PECK, the distinguished woman mountain climber, gave an illustrated lecture upon Peru and Bolivia.

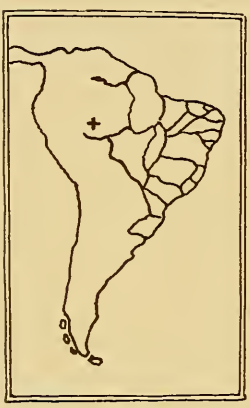
*Friday, February 17 (morning, 9.45 to 12.40—Afternoon, 2.15 to 6).*—During the sessions of Friday, the last day, many delegates, who had not previously been heard, spoke on various phases of Pan American commerce and comity. The speakers included Senator ELIHU ROOT, of New York, who was introduced as having done more to develop Pan American commerce and comity than any other man; Dr. L. S. ROWE, of the University of Pennsylvania, and delegate to the Fourth Pan American Conference; HENRY WHITE, chairman of the United States delegation to the Fourth Pan American Conference; WILLIAM C. DOWNS, of Boston, general expert on Pan American trade; Rear Admiral M. DOMECQ. GARCIA, of the Argentine Navy; Dr. FRANK L. RUTTER, of the Bureau of Manufactures, Department of Commerce and Labor; FRANCIS B. PURDIE, of R. G. DUN & Co., expert on credits; CHARLES L. CHANDLER, United States Vice Consul General at Buenos Aires; W. S. PETERS, of Kansas City; CASWELL A. MAYO, editor of Revista Americano de Farmacia y Medicina; HARRISON C. LEWIS, of the National Paper and Type Company, expert on advertising; FORBES LINDSAY, lecturer and expert on Panama; F. H. NEWELL, of the United States Reclamation Service; E. H. YOUNGMAN, editor of Bankers' Magazine; BASIL MILES, of the Post Office Department, expert on parcels post; Rev. CHARLES WARREN CURRIER, expert on schools in Brazil; WILLIAM E. CURTIS, correspondent and publicist, former Director of the Pan American Union; Gen. GEORGE H. DAVIS, former governor of Panama; ISAAC A. MANNING, United States Consul at La Guaira, Venezuela; DUDLEY BARTLETT, of the Philadelphia Commercial Museum; EDWARD A. DEEDS, of the National Cash Register Company; J. F. STUTESMAN, former United States Minister to Bolivia; AURELIO DE ARMAS, of Havana, Cuba, expert on Cuba; A. J. THOMSON, general Pan American trade expert; LOUIS D. RICCI, of the Barber Asphalt Paving Company, expert on Pan American trade; W. M. BENNEY, secretary of the National Association of Manufacturers; D. M. SEGOVIA, of Paraguay; W. C. WELLS, of the Pan American Union staff; FRANKLIN ADAMS, Chief Clerk and Editor of the BULLETIN OF THE PAN AMERICAN UNION; Dr. ALBERT HALE, of the Pan American Union staff; Capt. G. R. FORTESCUE, of the Pan American Union staff; W. B. MONTGOMERY, of the Pan American Union staff; JOHN VAVASOUR NOEL, Editor of Peru To-day, expert on newspapers; LOUIS S. CURT, expert on Latin America; WILLIAM M. DICKINSON, of the Otis Elevator Company, expert on Latin America; JULIUS KAHN, member of Congress from California; JOHN TEMPLE GRAVES.

Those who participated in the discussions included Dr. WILLIAM O. MCDOWELL, F. C. ENRIGHT, S. GUMPERT, P. N. HYDE, JAY C. FREEMAN, H. H. HAINES, REGINALD GORHAM, HARRISON C. LEWIS, A. H. KELEHER, HERBERT N. DAVISON, S. KRAUSZ, J. F. FOWLER, BELVA A. LOCKWOOD, ANNIE S. PECK, Mr. LOWE, JOHN A. OLT.

# THE MADEIRA-MAMORÉ RAILWAY.[a]

SOME further information regarding that section of Brazil through which the Madeira–Mamoré Railway is now being built and experiences in connection with its construction may be of interest to those readers of the BULLETIN who have seen the article in the number for January, 1910.

The history of the present attempt to build the railway may be said to have begun in November, 1906, when the Government of Brazil entered into a contract for its construction with Civil Engineer JOAQUIM CATRAMBY, of Rio de Janeiro.



MAP SHOWING THE LOCATION OF THE MADEIRA AND MAMORÉ RAILWAY.

Early in 1907, Doctor CATRAMBY entered into an agreement with Mr. PERCIVAL FARQUHAR, the American financier so largely interested in Brazilian enterprises, and Messrs. MAY & JEKYLL, contractors, were engaged in the United States to construct the railway for the Madeira–Mamoré Railway Company, incorporated in 1907 under the laws of the State of Maine.

Under a contract on a percentage basis, the contractors are proceeding with all construction, the railway company being represented on the works by a chief engineer and an accountant to direct the engineering work and audit the accounts and expenditures.

Toward the end of 1907 the railway company was permitted to function in Brazil, and early in 1908 the Government officially recognized the transfer of the CATRAMBY contract to the railway company.

In February, 1909, the Government leased the railroad to the Madeira–Mamoré Railway Company for a period of sixty years from January 1, 1912, on the basis of payment by the company to the Government of a gradually increasing percentage of gross receipts.

Based upon the 1885 report of Civil Engineer JULHO PINKHAS, of the Brazilian Government Commission, the total length of railroad to be built from Santo Antonio, the village at the head of Madeira River navigation, to Guajarámerim, the name given the upper or first of the series of falls at the foot of navigation of the

[a] By P. H. ASHMEAD, F. R. G. S., Mem. Am. Soc. C. E., consulting engineer (late chief engineer Madeira-Mamoré Railway).

Mamoré River, was estimated to be 340 kilometers (211 miles). In addition to this the Government in 1910 agreed to the construction of a branch line, estimated to be 40 kilometers (25 miles) in length, from a point on the railroad to a point above Esperanza Falls on the Beni River in Bolivia, which, to the benefit of navigation on that river, will obviate the necessity of portaging around those falls. This branch will cross the Mamoré River by a bridge upward of a half a mile long.

Small hills of granite lie close to the right bank of the river at Santo Antonio, restricting the area suitable for a railroad terminal and port site, in consequence of which the Government at the request of the company permitted the site for the northern terminus to be located on a comparatively flat tract of land at Porto Vellio, some 7 kilometers down the river, where a large area has been purchased with a river frontage of some 9 kilometers extending into the forest 3 kilometers, an almost ideal site for the various purposes for which it will be used.



(Photo by Harris-Ewing.)

P. H. ASHMEAD.

F. R. G. S., Mem. Am. Soc. C. E., late chief engineer of the Madeira-Mamoré Railway.

As stated in a number of other articles on the subject, the series of 19 falls and rapids between Santo Antonio and Guajarámerim prevent navigation other than by small canoes (montarias), and the larger sort (batelões) of from 2 to 10 tons capacity, which must be portaged around the large falls, but in which, during high water, the boatmen frequently shoot the rapids without unloading.

The losses in lives and cargoes over the river route have been estimated by Brazilian officials and business men to be from 20 to 50 per cent per annum. The latter is perhaps too high an average loss for any great number of years, while 20 per cent is doubtless too low. As no records are available from the wide, sparsely settled territory which contribute to the traffic, perhaps 25 per cent approximates the actual yearly loss for a long period of passed years.



A "PICKETE" IN THE DENSE FOREST.

The "picketes" are cut by the engineers and widened by the construction men to form a mule trail.

By reference to a good map of that part of the South American continent showing Brazil, Bolivia, and southern Peru, it becomes apparent that this railroad occupies a position comparable to that of the neck of an hourglass, through which may be expected to pass downward all of the minerals from the rich eastern slope of the Bolivian Andes and also the rubber, cattle, and varied other products of a territory drained by upward of 2,400 miles of waterways navigable by steamers of from 100 to 600 tons capacity. The railway company has placed orders for the construction of 3 steamers for this service.



BUTTRESSED ROOTS OF CERTAIN TREES COMMON IN THE AMAZON VALLEY FORESTS.[a]

So also there will pass upward machinery for mining and other purposes, steamers in sections for private ownership, all heavy freight, and in addition the foodstuffs other than those produced in the country, brought from the rest of the world, all of which can now be brought by ocean steamers to Porto Velho, nearly 1,600 miles from the sea, 900 miles of which are on the Amazon and 700 on the Madeira.

To those who make but cursory references to maps in connection with their affairs, and therefore fail to realize the immense areas of the South American States, owing to the difference in the scales to which maps of various parts of the world are drawn, comparisons of areas will better illustrate the immense size of this particular section of South America.

[a] Photographs illustrating this article taken by D. B. Merrill, Official Photographer.

The State of Amazonas has an area of 1,895,000 square kilometers, upward of 731,000 square miles; Matto Grosso, 1,379,000 square kilometers, upward of 532,000 square miles; and that part of Bolivia which will contribute directly to the railroad, being somewhat larger than the larger State, has an area of about 570,000 square miles.

Now, adding to the New England and Middle Atlantic States the combined areas of Ohio, Indiana, Illinois, Michigan, and Wisconsin on the west, and Delaware, Maryland, Virginia, West Virginia, and Kentucky on the south, there results an area of about 539,000 square miles, a little more than that of the one Brazilian State of Matto Grosso and slightly less than that part of Bolivia contributing to the



CANVAS BAGS RENDERED WATERPROOF.

Canvas bags are coated with crude rubber, making them impervious to water. When a canoe is capsized, its contents is placed within these bags, which float easily, and thus the supplies are saved.

railroad traffic. Then, adding to the areas of the North American States mentioned the areas of Tennessee, North and South Carolina, Georgia, and a part of Florida, we have an area corresponding to that of the State of Amazonas.

Matto Grosso is six times and Amazonas is more than eight times the combined areas of England, Wales, and Scotland, and respectively more than two and one-half and about three and one-half times the size of Germany or France.

The combined areas of these two Brazilian States and the part of Bolivia mentioned are slightly less than one-half the area of continental Europe, and a little more than one-half of that of the United States, inclusive of Alaska.

Practically all of the railway proper is in Matto Grosso, only 7 kilometers of the main line being in Amazonas. The branch of 40 kilometers to a point above Esperanza Falls will be in the Republic of Bolivia. The climate in all of this country east of the foot of the



CARIPUNA INDIANS.

Peculiar type of canoe used by the Caripuna Indians on the Mutumparana.

Andean cordillera is warm and damp like that of the rest of the Amazon Valley, but, other than the four hours from 11 in the morning until 3 o'clock in the afternoon, the heat is not oppressive, and after the forest had been cleared a refreshing breeze blew at Porto Velho and the larger camps up the line.

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During nearly ten months of the year the temperature ranges from 22 C. (72 F.) in the early morning to 34 C. (93 F.) in the afternoon, the maximum occurring between 2 and 3 p. m. In the cool season, from toward the end of June until the end of August, the range is from 19 C. (66 F.) to 31 C. (88 F.). Quite infrequently the temperature during the night in the month of August reaches 15 C. (59 F.) and those whose duties called them early to the line were comfortable for some hours with overcoats. One should sleep with a light blanket at the foot of his bed or in his hammock, and seldom is it not needed before morning, and there are nights in August when, for comfort, more cover is required.

During the dry season the first two hours of daylight are truly enjoyable, a soft breeze stirs and the air is dry and exhilarating, but from 8 o'clock the heat gradually increases and the breeze lessens until 11; then it becomes oppressively hot. However, in the narrow trails, the "picketes" cut by the engineers into the dense forest, it is not hot, so the majority of the junior engineers prefer work at the front rather than on construction in the glaring light of the cleared right of way, returning from such service quite bleached as to color and with luxuriant first growth beards.

The most efficient laborers on construction, the Spanish Gallegos, a greater part of whom are subcontractors, quite generally cease work from 11 until 4 because of the heat, and during moonlight they not infrequently work the greater part of the night. While this method is a relief from the heat of the day, it unfortunately exposes them to the anopheles mosquito during its working hours, at early dawn and at dusk.

The rainfall approximates 100 inches (2,540 millimeters) per year, the precipitation for 1908 having been a few inches more and for 1909 slightly less than that. The dry season from mid-June to mid-September has an average monthly precipitation of less than 1½ inches (38 millimeters). During the particularly dry period, from mid-June to mid-August, 1909, there was a mere trace of rain. The period of greatest precipitation from mid-November to mid-March has a rainfall of nearly 20 inches (508 millimeters) for the monthly maximum. The platted precipitation curves of the expeditions of 1872–1874, and 1877–1879 agree in the main with these later records.

The country is covered with dense forest, a jungle with few swamps. Other than during the rainy season marsh or swamp land causes little difficulty in passing through any part of it, walking or mounted, but the dense undergrowth forms an impassable barrier in every direction, which can be passed only after incessant cutting with machetes and axes. The unbroken forest is said to extend for 40 leagues from the edge of the river, except that at the bend of the



TYPICAL TREE IN THE OVERFLOWED SECTIONS.

Certain trees in the overflowed sections have their trunks supported by roots above the surface of the ground.

Madeira River near the mouth of the Abuna there remains a large area with but a scrub growth of timber, confirming reports given to Mr. MATHEWS by some of the men of the 1872–1874 expedition, and is an evidence of a different character of soil in that place.

The district through which the railway is being built is in general somewhat over 100 meters above sea level, in which small hills rise from 30 to 60 meters higher. Health conditions have been bad, but as in that part of the Acre Territory drained by the Purus River where conditions were considered to have been much worse than the Madeira Valley, there has been lately a steady improvement, and it therefore may be expected that an influx of settlers into this region may also result in greatly improved health conditions.



TEMPORARY THATCHED HUT.

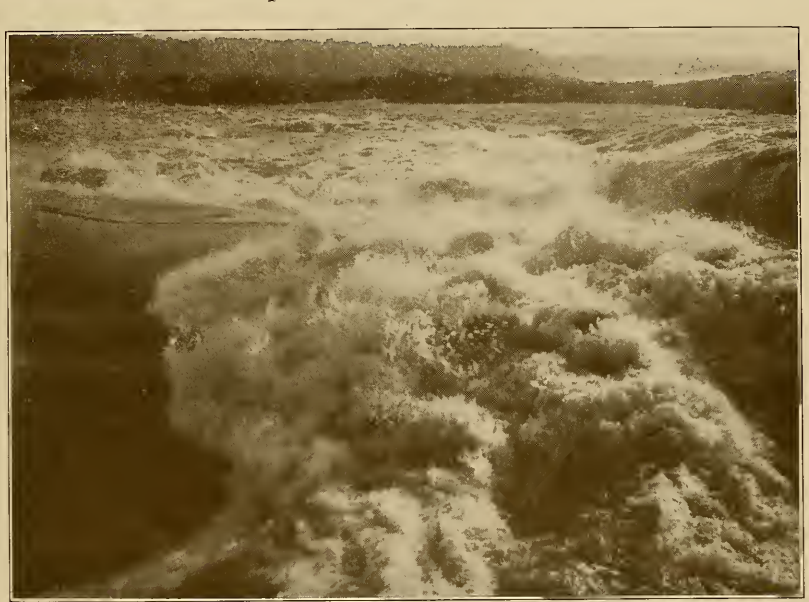
An auxiliary hospital in a construction camp.

Ill health in the present work is very largely malarial. Other serious diseases to be fought are hookworm (uncinariasis), dysentery, beriberi, and blackwater (hæmoglobinuric) fever. Of the deaths, the physicians report that a great number occur from chronic diseases, among them cirrhosis and abscess of the liver, and nephritis, which result fatally only after many months or years of insufficient food, of intestinal parasites, and of malaria.

Among the nations represented other than Brazil, which has supplied upward of 50 per cent of the force, and the United States, may be mentioned Colombia, Panama, Argentina, Bolivia, Peru, Chile, England, with Scotland, Ireland, and Wales, and as well the islands of Malta, Jamaica, and Barbados, France and the island of Martinique, China, Turkey, and Persia.

Ordinarily the unhealthy season is from June to August, but in 1909 September, October, and November were the most trying months, the records including a particularly large number of cases of beriberi. Men with this disease are advised to leave the region at once—a change of climate results in a quick cure.

The houses in Santo Antonio, other than those hastily built of thatch, are constructed with a light framework of wood cut in the forest, plastered with mud, and roofed with corrugated iron sheets or tiles. To accommodate boatmen at the various falls of the river and for the railway laborers the houses (barracões) are of light framework thatched all over with palm. Some few of the subcontractors build



ONE OF THE FALLS OF THE MADEIRA RIVER IN BRAZIL.

Such falls as these impede the navigation of this river for about 200 miles. This necessitated the building of the Madeira-Mamoré Railroad.

for themselves small tent-shaped structures, using the fronds of the palm solely.

As a protection from mosquitoes and other insects the inhabitants and the laborers merely use mosquito bars, glove fitting over the ropes of the hammocks and hanging to the ground. The staff at Porto Velho live in houses doubly protected by screening, the porches on the outside and the windows and doors within, and in addition to such screens most of the employees sleep under mosquito bars, forming a third protection against insects.

It is only necessary to refer to the records of Brazil's accomplishments in Rio de Janeiro and Santos and to our own results in Cuba and Panama for proof that proper precautions against the Anopheles

and Stegomyia result in immensely improved health conditions, and to the Mississippi Valley for proof that a constant improvement in the health in malarial districts follows the advent of increasing numbers of settlers.

Coincident with enlarged sleeping quarters and greater protection from mosquitoes in Porto Velho there has been a gradual decrease in malaria and the severity of the attacks. Other than "piums," insects are no more in evidence than in many other tropical countries. The pium, a spotted small fly, is the most annoying, and of these there are myriads in newly cleared sections of the forest and along the margins of the rivers. They alight quickly and quietly on cheeks, neck, and hands; there is no sensation at the moment, but after



BATELAO OF EIGHT TONS CAPACITY.

This batelão, of unusually large capacity, is being transported by laborers around the falls.

a few minutes there is an intense itching at the small blood spot marking the bite, which may continue with more or less intensity for days afterwards.

There are mosquitoes, but not so numerous nor so aggressive as in many parts of the United States. There is a small red ant, the formiga de fogo or fire ant, most annoying when dislodged from foliage in clearing the forest, whose bite is as painful for the instant as the puncture of a red-hot needle. The large black ant an inch and a half (38 millimeters) in length is seen, but not in great numbers. Umbrella, exploratory, and flying ants, and the "cupim" are there in great numbers, the last named the most destructive of all to timber. They attack the native woods, hard and soft, as soon as it has been felled, working from the outside directly toward the heart, and, burrowing longitudi-

nally, they honeycomb and destroy in a manner similar to the toredo. Pine lumber was imported from the United States, and until nearly two years after its use their attacks on it were not noticed; after about that period of time, however, a section cut from a floor joist disclosed the heart practically destroyed. They work in the dark, building tunnels of mud on the outside of the bark, and vertical shafts of mud from the ground to the underside of timber stored in piles. The late



NEST OF THE "CUPIM" ON A GROWING TREE.

The "cupim" is a most destructive insect to timber, working from the outside directly toward the heart of a tree or log.

Mr. O. F. Nichols, resident engineer for the London interests in the 1877–1879 expedition, expressed the opinion that they would destroy anything but steel and concrete. The ridgepoles, 3 or 4 inches in diameter, in palm shacks have been destroyed in two months.

At times myriads of black, slender flies have been annoying, by reason of their numbers and persistence in buzzing about the head, but they do not bite. As in parts of the United States there are

redbugs and ticks, against which leggings are a shield. In buildings unprotected by screens, large black crickets are destructive to boots and clothing left in contact with the floors or walls.

There is a plentiful supply of game. The camp cook, or his assistant, is usually the hunter and purveyor of fresh meat for the small camps, while in larger camps a man is usually assigned to the duty. Parts of peccaries and tapirs are excellent, and some of the



TELEGRAPH POLES OF OLD IRON RAILS.

Wooden poles can not be used as the "cupim" would destroy them in a few months.

men have not hesitated to eat monkeys. The mutum (wild turkey) and the jacou (similar to a large pheasant) and a large number of smaller animals and birds are obtainable. During low water it is possible to have the delicious steaks of the tartaruga (huge turtle) and its eggs. In the old days explorers and travelers grew nauseated from a never-changing menu of turtles and their eggs, but with us they furnished a desirable change at times.

Jaguars of a huge size have been killed, but have never molested us. Frequently during high water the bellowing of alligators is heard in the streams near camps, and the first sport of the new arrivals is to fire at them with rifles, shotguns, and revolvers on the passage up the Madeira River.

Swimming is not an attractive sport because of the electric eel and the pyranha, a fish with rows of needlelike teeth, ravenously blood-thirsty and aggressive, attacking in large numbers and literally tearing their victims to pieces.

Several men who accidentally fell into the Madeira and Jaciparana have suddenly disappeared while swimming for shore, and it is not known by which attacked—electric eels or pyranhas.



BATELÃES ABOVE SANTO ANTONIO FALLS.

Picture taken during the low-water season.

As the pioneer, whom the construction men follow, the engineer faces the first and greatest dangers. He collects his supplies for three or four months, gathers his men together and stoicly heads up river toward the front with a knowledge of the history of the sickness, death, and hardships suffered by the previous expeditions. He works during all the daylight in the field and far into the night in his camp, but enjoys life notwithstanding, and there are few of his kind who hesitate to follow orders honestly and loyally.

Both of the previous expeditions had been attacked by the Indians, and from the time the present expedition began work there were periodic reports of their proximity, even to Santo Antonio.

An incident regarded then seriously occurred at the time the engineers had reached the vicinity of kilometer 30, about 19 miles out, where some rude arrangements of sticks at the side of one of the lines was translated by a laborer into a real signal of "Danger, go no farther." The interpreter of the signs, whose legs, deeply furrowed, had been scarred, he said, by arrows, called attention to the signs, saying they were similar to signals placed in the estradas, or paths, passing the rubber trees in the seringals, and that when seen by the rubber gatherers, they ceased work at once and removed themselves from the district.

The engineers considered the matter and continued their work. There were no attacks. At the Jaciparana, a river some 90 kilometers



A WASHOUT AT KILOMETER 3½ DURING THE RAINY SEASON OF 1910.

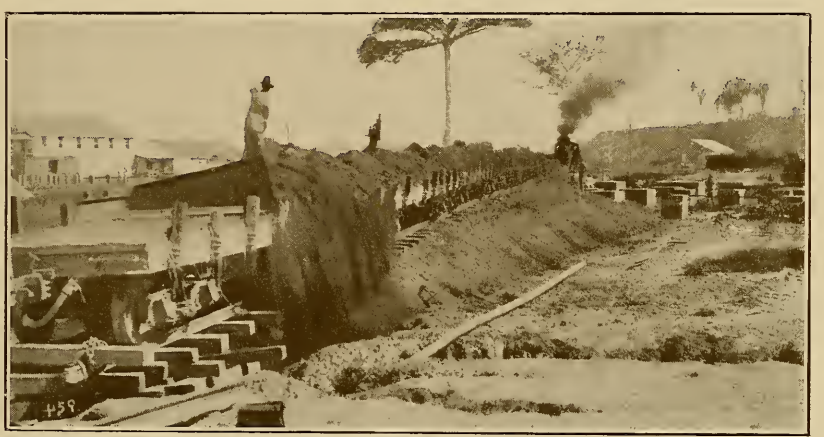
out, there had been attacks, we were credibly informed, in 1904, in which several whites had been killed. It seemed possible that attacks might be made there, as the river flowed through some 400 kilometers of dense forest before reaching our crossing, but we passed it without incident other than more serious cases of malaria.

Always taking proper precautions against surprises and attacks, the engineers continued their work, thoroughly mapping the country, to do which necessitated cutting hundreds of miles of side lines for the topographers. One of the party, some distance behind his companions, having stopped to shoot a wild turkey, heard soft footfalls behind him and, glancing back, saw a jaguar following, its eyes on the turkey. Pulling his revolver, he fired and expeditiously headed

for camp. On resumption of work next day his companions found the gun and the carcass of the turkey in the trail, and later in the day; while cutting a side line some distance away, saw the dead jaguar

While doubtless some of the men had been seen by the Indians, they were not encountered until nearly two years after the survey work began. At the Mutumparana—a much smaller river than the Jaci, 175 kilometers out—the Caripunas were first met by Assistant Chief Engineer ENGLESING, recently deceased, to whose judgment, tact, and agreeable personality was doubtless due the friendly manner in which these Indians received the engineers in their Molacca, or village, and their continuance of this manner.

The Caripunas were filthy, happy, and perfectly nude. Their utensils are crude and few in number. Those members of the tribe having long hair are more attractive in appearance than others with



CONSTRUCTION TRAIN AND PLOW.

Combination train and plow used in filling Porto Velho yard.

short hair, and the difference in facial characteristics is sufficiently pronounced as to indicate different tribes, although both are called Caripunas in the district. For quite a while they refrained from accepting any food from the whites, but in time grew unsuspicious and frequently visited our storehouse near the river at Tres Irmãos.

A storekeeper, suffering from fever and with the irritability apt to be in evidence in the Tropics, becoming wearied with their presence at his storehouse, signed to them to leave, with threats of shooting if they remained. They left, but shortly returned with others armed with bows and 7-foot arrows, intimating their entire willingness that the shooting begin. The opportune arrival of a new storekeeper, less irritable in disposition, relieved both the situation and its cause, and resulted in a resumption of the previous friendly relations, which have continued.

For a number of years the one great product will be rubber. Large numbers of castanha trees, from which the well-known Brazil nuts are gathered, are in the district and will add to the traffic. The soil is fertile and its cultivation will not be difficult. It was supposed that worms and insects would destroy seeds and plants before maturity, but, on the contrary, tomatoes, eggplants, lettuce, and other garden produce have grown well.

Some pioneer settlers have already cleared small areas near the railway and grow maize; mandioca, from which comes the Brazilian staff of life—farinha—thrives along the Madeira. Along the right of way and the right bank of the river guinea grass planted as



THE MADEIRA RIVER ALLIGATOR.

pasturage for mules and oxen grows amazingly well, and the wind and water are helping it along down the river.

A superior quality of tobacco is raised just below the mouth of the Madeira by Mr. STONE, an American by birth, upward of 80 years of age, who has lived in this part of Brazil more than forty years.

Rubber, too, will be the main product shipped from the adjacent district in Bolivia. More cattle are required throughout the Amazon Valley and shipments from the large herds in Bolivia will pass over the railroad when it has reached a point convenient to Villa Bella. These can be sold profitably at a third of the present prices along the Amazon.

Copper and gold will be mined higher up on the cordillera. One large firm in Bolivia will immediately ship machinery and dredges for mining when the railway is completed. Hides, dried meat, sugar, and cacao will pass out from Bolivia. In Brazil the export duty on rubber is 23 per cent, which by additional imposts of municipal authorities is raised to practically 25 per cent.

Laborers are very scarce and the zone furnishing labor for the seringals is limited. The eminent Brazilian engineer, Dr. PEREIRA DA SILVA, in 1907 calculated it to be absolutely impossible to extract rubber from the interior of the Amazon region for less than 4 milreis ($1.20) per kilo (2.2 pounds); with the railway in operation, however, the cost of transportation of men and supplies, the dangers of



ALLIGATOR EGGS AT THE JACI-PARANA.

the climate, and the time occupied in passing to the rubber districts in the region contributing to the railway will be much lessened and result in a decreased cost of production.

Practically all of the region is virgin rubber country. It is true that rubber has been collected there for years, but no one place has been systematically worked; moreover, so much remains of the natural rubber forest in Brazil, Bolivia, and Peru that no serious consideration has been given to planting young trees and their cultivation, notwithstanding the satisfactory results obtained in the Far East.

The railway company now owns the region from the Mutumparaná to Guajarámerim extending from the Mamoré and Madeira Rivers

to the Serra dos Parecis, which it is intended to develop following improved methods.

The railway company for its private use has installed the Marconi wireless telegraph system at Manáos and Porto Velho, and its river steamer *Madeira-Mamore* has also been equipped. Communication between the northern terminus of the railroad at Porto Velho and Manáos was inaugurated in April, 1910, and has continued satisfactorily since that time, and by means of the telephone to the head of construction it is now possible to communicate from the head of the line to Porto Velho, by wireless to Manaos, and from there to New York and Europe and receive a reply the same day.

In November, 1910, track had been laid to kilometer 160 near the Mutumparaná, and the railway was being provisionally operated to



SKIN OF A "GIBOIA" OR ANACONDA.

This skin measured 25 feet 9 inches in length. In the background are banana trees of one year's growth.

kilometer 153, at which point the track is close to the Madeira River, from which point boatmen are now saved the passage of five of the falls and rapids. If the progress of construction continues as it has, track should be laid to Guajaramerim in August, 1912.

By permission of the Government of Brazil the site of the town at that end of the line has been named Villa Church, in honor of Col. George Earl Church, to whose energy and interest in the early days the Government owes much for the accomplishment, and whose interest in the present endeavor only ceased at his death in 1910.

By boat the time consumed in the passage up from Santo Antonio to Riberalta on the Beni River is from thirty to sixty days, according to the season, with the necessity of carrying sufficient food for passengers and crew on the journey. The passage down required from ten to twelve days. Over the completed railway the journey in either direction may be accomplished in from ten to fifteen hours.

From Villa Bella to Guajarámerim by boat requires from six to seven days going up and from four to six days down. By rail in either direction four hours should be sufficient time for the journey.

The difference between high and low water in the Madeira at Porto Velho is 46 feet (14 meters). Vessels drawing 20 feet can navigate to Porto Velho from early in January until about the end of May. Early in June the water begins to fall rapidly, and during August and September river steamers drawing 8 feet at times have difficulty in navigating the river, owing to three shallow reaches, and have required from fifteen to twenty days for the passage up from Manáos, a trip that in high water can be made in less than six days. Already one ocean company has a steamer especially constructed for the service, sailing on a regular schedule from Liverpool to Porto Velho.



TYPICAL CAMP PET.

The monkey, as a pet, is a favorite and becomes quite devoted to the camp.

Until the completion of the railway mechanics skilled in all kinds of steam-railroad work, men for the clerical staff, and a certain number of civil engineers, preferably with tropical experience, will be needed. Sickness, resignations, and the expiration of the contracts of staff employees cause frequent changes in the skilled force, as in all tropical countries.

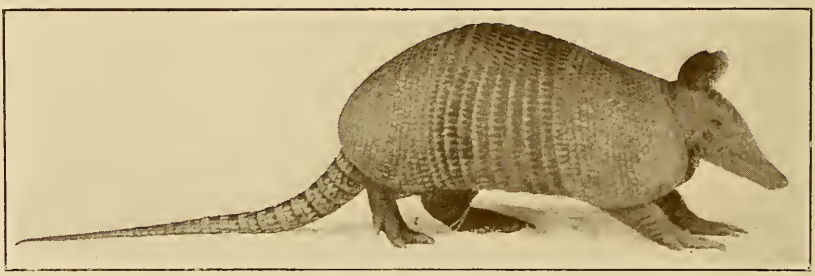
The State of Matto Grosso has established these prices for State lands, per hectare (2.47 acres):

| | | |
|---|---|---|
| Marsh land (alagodiços) 400 reis | approximately.. | $0.12 |
| Grazing land (campos) 800 reis | do.... | .24 |
| Agricultural (lavoura) 1,500 reis | do.... | .45 |
| Rubber (seringal) 3,600 reis | do.... | 1.08 |

The estimated population of Amazonas in 1908 was 379,000, 1 person to 5 square kilometers, or 1 to a little less than 2 square miles; in Matto Grosso there were 142,000, 1 person to somewhat more than 9 square kilometers, or 1 to a little less than 4 square miles. In the

adjacent region of Bolivia doubtless there are not more per square mile than in Matto Grosso.

The lease of the railway provides that immigrants, their baggage and tools, and that seeds and plants shall have free transportation.



AN ARMADILLO.

Common to the Madeira regions is the Armadillo, an edentate mammal having an armorlike covering formed by the ossification of the greater part of the skin and the union of the bony scutes.

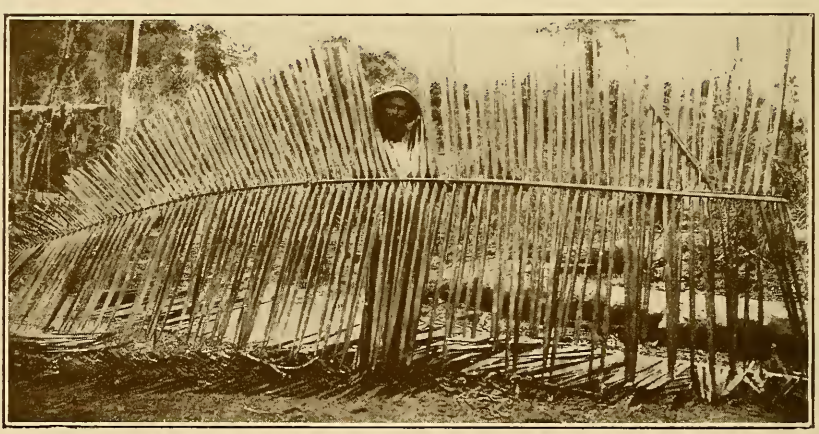
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# ANCIENT TEMPLES AND CITIES OF THE NEW WORLD[a]

## CHICHEN ITZA.

LONG before the discovery of America there flourished in southern Mexico, Guatemala, and parts of Honduras a great civilization, which has been called the Maya. It may be said at the outset without exaggeration that this civilization had reached a height equalled by no other people of the Western Hemisphere prior to the coming of the white man. In architecture, in sculpture, and in printing the Mayas excelled. Their priests were astronomers of no mean ability, having observed and recorded without the aid of instruments of precision such as are known to us the lengths of the Solar and Venus years, and probably the lengths of the Mercury and Mars years. In addition to this they had developed a calendar system and perfected a chronology which in some of its characteristics was superior to our own.

But the ancient glory of this people had long since departed when HERNANDO CORTEZ first came in contact with them on the coast of Yucatan in 1519. Their star had set. Their greatest cities had been abandoned and lay in ruins, and their country was prostrated by the quarrels of a score or more of petty independent chieftains, each of whom was waging war on the others. Even the memory of the older cities of their culture, such as Palenque, Copan, and Quinigua, for example, seems to have passed from the mind of men, their former existence forgotten. Famine, pestilence, and internecine strife are all said to have been contributory causes to the decay and eclipse which overtook this brilliant aboriginal civilization several centuries before the Spanish first set foot in the New World.

Probably the largest, and certainly the most magnificent, of the ruined cities which the Spanish conquerors found on their arrival in Yucatan was Chichen Itza, around which even in its desolation there still cluster a thousand traditions of former sanctity and splendor. The name Chichen Itza is Maya, and means Chi-mouth, Chen-wells and Itza, the name of the Maya tribe, who lived in the neighborhood of the place. "The Mouth of The Wells of The Itzas" therefore is the meaning of the name; nor could a more appropriate one have been applied to the place by any people.

[a] By SYLVANUS G. MORLEY.

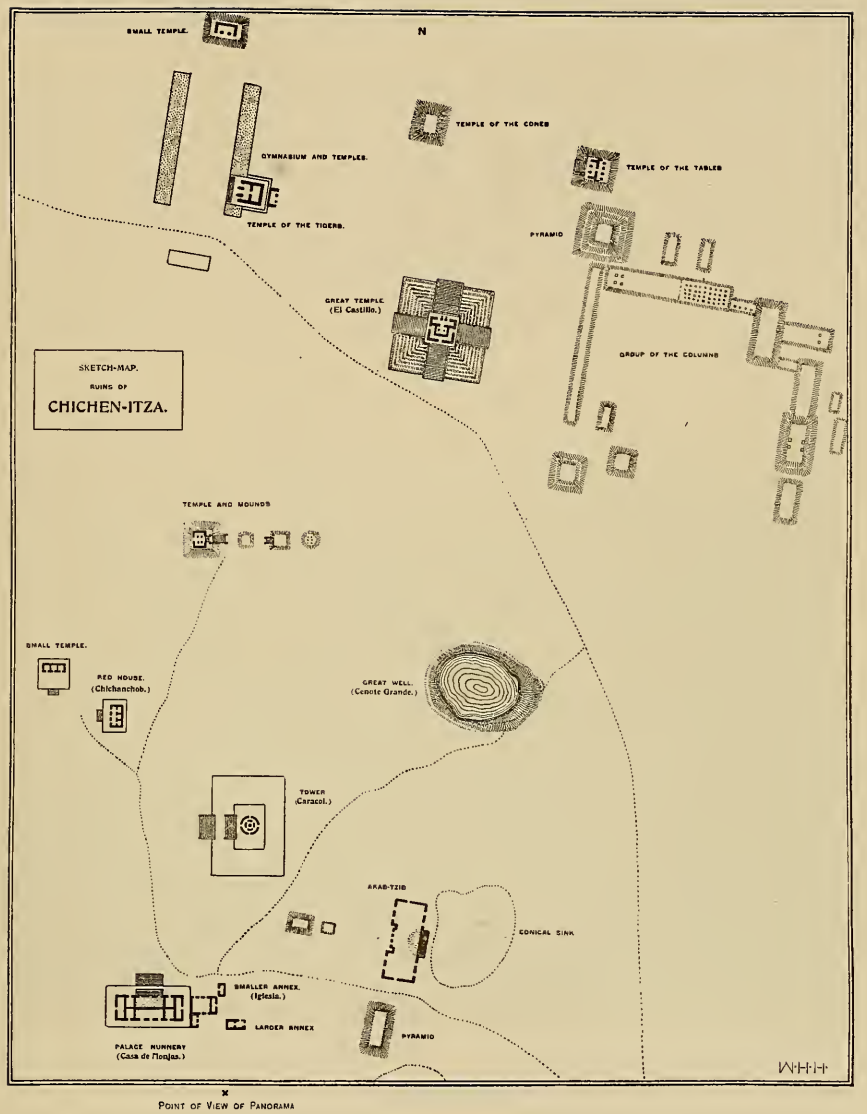
The whole peninsula of Yucatan is a vast limestone formation with little or no surface water. One may travel for miles and miles and never cross river or brook, or even chance upon a modest spring. Indeed, in the northern part, where most of the great ruined cities are located, water is fully 70 feet below the surface of the ground. The modern inhabitants overcome this difficulty by means of wells and windmills, which afford the only source of water supply during the dry season (December to June) excepting what little rain water may have been caught during the rainy months and stored in cisterns.




MAP OF YUCATAN SHOWING LOCATION OF RUINS OF CHICHEN ITZA.

But of wells and windmills the ancient Mayas knew nothing, and, generally speaking, had it not been for the great natural reservoirs which nature has scattered here and there over the country Yucatan never could have been colonized.

These great natural wells, or as the Mayas call them cenotes, are found all over Yucatan. They are usually about 150 feet in diameter, or sometimes more, and about 70 feet in depth to the level of the water. Geologists say that these cenotes are places where the limestone crust, which everywhere covers the surface of Yucatan, has




Drawn by Holmes.

MAP AND PANORAMA OF THE RUINS OF CHICHEN ITZA.

become weakened by the washing of subterranean waters and has collapsed of its own weight, forming great sink holes or natural wells on a large scale. And now it is clear why the ancient inhabitants of Chichen Itza so named their city. In the course of their wanderings, the general trend of which was northward, the Itzas, entering Yucatan from the south, finally reached the two cenotes, around which Chichen Itza later was built, but which then was probably nothing but wilderness. Here the striking contrast afforded by such an abundance of water in a country so generally parched could not fail to have attracted their attention. The place must have seemed to the thirsty wanderers a God-given site for the location of their new home. By right of discovery they claimed the place, and to the city which grew up around



(Drawing by Catherwood, 1844.)

THE CASTILLO OR CASTLE (so called).

the cenotes they gave the name Chichen Itza, "The Mouth of The Wells of The Itzas."

Concerning the foundation of the city the early Spanish and native accounts are equally vague. One tradition has it that three brothers came from the west and reigned at Chichen Itza. They were very religious and built the many beautiful temples, which may still be seen there to-day. At first they ruled wisely, living in perfect harmony with each other, but finally one of them having either died or disappeared, the other two fell to quarreling to such an extent and acted so unjustly and shamelessly that the people rebelled and killed them. After this upheaval the city was abandoned. How true this tradition is to the facts in the case it is difficult to say; but the great

antiquity of Chichen Itza can not be doubted, since it is mentioned in some of the early manuscripts as having been the first place in Yucatan to be settled by the Mayas.

The two cenotes at Chichen Itza have been known by the Mayas from time immemorial as the Cenote Grande and the Cenote Sacra, or the Large Cenote and the Sacred Cenote, respectively. The first of these only in former times was used for the water supply of the city, the Sacred Cenote being reserved for religious use exclusively. It is the latter, however, and the religious observances held in connection with it, which gave the city its holy character. From far and



(Drawing by Catherwood. 1844.)

END VIEW OF THE MONJAS OR MONASTERY (so called).

near all over Yucatan, and probably even from points more distant, pilgrimages were made to the Sacred Cenote. It seems to have been the most holy shrine of the Maya people, comparable only in importance to the Mohammedan Mecca and the Christian Jerusalem. In time of drought offerings of all kinds were thrown into it—treasures, and in cases of extremity even living human sacrifices. These, says one old chronicler, were supposed to continue living after they had disappeared below the waters of the Sacred Cenote, even though they were never seen again by man. Up to the time of the Spanish Conquest this custom was practiced, and as late as the year 1536 there is recorded a pilgrimage to Chichen Itza for the purpose of sacrificing

some slaves in the Sacred Cenote to alleviate a famine which was then devastating the land.

Chichen Itza to-day is somewhat changed in appearance from the time when pilgrims came from far and near to appease with human sacrifice the wrath of offended deities. Now the city lies buried in a thick jungle, which has steadily won its way into the very heart of the holy place. Colonnades have been overthrown and pyramids covered with trees to their summits; courts have been lost in a tangle of thorn and creeper; and palaces stripped of their sculptured embellishment.



(Photo by Maudslay.)

BASE OF SERPENT PORTAL COLUMN.

Entrance to Temple of the Tigers Ball Court.

Desolation has spread everywhere in the wake of the encroaching vegetation.

To visit the ancient city now, one jolts for 15 long and weary miles in a 2-wheeled covered cart drawn by 3 mules over the roughest kind of a highway imaginable. This present inconvenience fortunately is not to be one of long standing. A new and straight road is about to be built and an automobile service to the ruins probably established, which will shorten the present length of the trip from four hours to about half an hour. Now, however, this ride from Citas, the nearest

railroad point, seems interminable. The road, so called by courtesy only, winds through the impenetrable bush, which everywhere in the natural state covers northern Yucatan. Through this the creaking cart finds a dubious way mile after mile until every muscle in one's body groans an agonized protest. Finally, when it seems that the limit of physical endurance has been reached, the cart suddenly lurches around a sharp turn in the road and as if by magic the lofty Castillo flashes into view, towering high above the plain and the rest of the city in its lonely magnificence.

This imposing structure, the highest in Yucatan, rises 78 feet above the plain. The pyramid on which the temple stands is 195 feet long on each side at the base and covers about an acre of ground. It is made of 9 terraces of faced masonry, each terrace elaborately paneled to relieve monotony of effect. Up the center of each of its four sides there rises a stairway 37 feet wide. These stairways have massive stone balustrades, carved to represent serpents, the heads in all cases being at the base of the stairways and flanking them. It is at the western base of this pyramid that the causeway leading to the Sacred Cenote begins. From the connection of the two places by this causeway, or "Via Sacra" perhaps, we may well believe that the ceremonies, which always closed so tragically at the Sacred Cenote, were inaugurated at the temple on the summit of the lofty Castillo. It requires but little effort of the imagination to visualize once more the long-forgotten scene; the white-robed priests with smoking censers, leading the garlanded sacrificial victims down the serpent stairway, and thence along the "Sacred Way" which leads to the pit of death. Standing on the brink of this great hole in the earth's crust and looking down into its somber depths, never a ripple stirring the dark-green water far below, with trees arching high above, the cry of the unfortunate victim as he plunges downward almost rings again in one's ears. Then a splash and—silence. The whole forms a never-to-be-forgotten picture.

The Castillo would seem to have been the center of the ancient city, and probably its chief sanctuary. To the north lies the Sacred Cenote and the causeway, just mentioned, leading to it. On the east is a vast group of buildings, colonnades, courts, and pyramids, "The City of a Thousand Columns," as some one has picturesquely described it. Due west is the group of structures known as the Ball Court. To the south for half a mile or more, scattered through the jungle, are pyramids, courts, temples, and palaces. The central location of the Castillo with reference to all of these, as well as its great size and commanding height, argue strongly that it was the chief sanctuary of the Holy City.

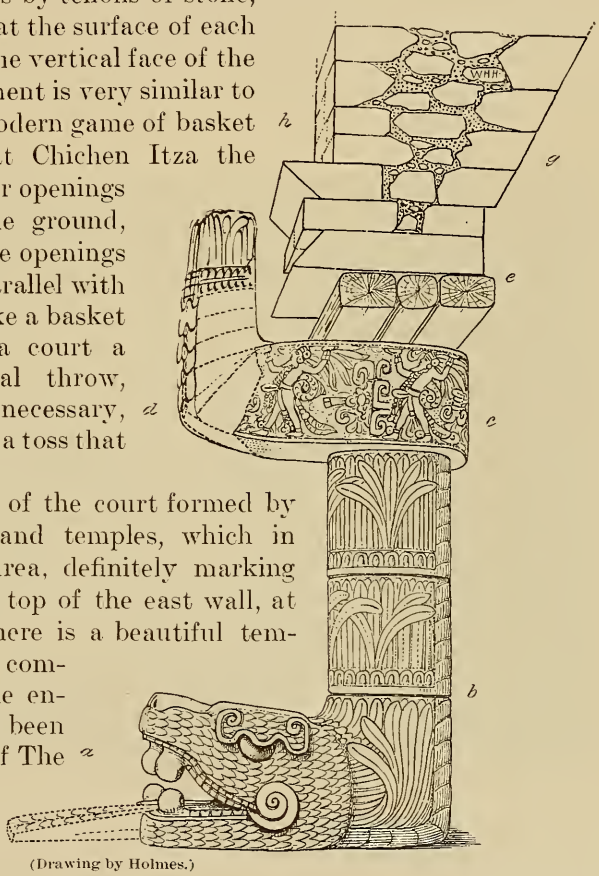
Another interesting group of structures at Chichen Itza, perhaps slightly less sacred in character than the Castillo, is the so-called



Photograph from W. P. Young, Progreso, Mexico.

THE MONJAS OR MONASTERY (SO-CALLED). (BACK VIEW.)

"Ball Court," mentioned above as lying just west of the Castillo. This group is composed of two parallel masses of solid masonry, each 272 feet long, 27 feet high, and 16 feet wide, placed 119 feet apart from each other. These two great walls, for such they really are, form a court nearly 300 feet long by 119 feet wide. High on the side of each at the middle point from end to end there is attached a stone ring 4 feet in diameter with a hole through it. These rings are fastened to their respective walls by tenons of stone, and are so placed that the surface of each is perpendicular to the vertical face of the wall. The arrangement is very similar to the baskets in our modern game of basket ball, except that at Chichen Itza the "baskets" have their openings perpendicular to the ground, while in our game the openings in the baskets are parallel with the ground. To make a basket at the Chichen Itza court a somewhat horizontal throw, as in baseball, was necessary, while nowadays it is a toss that wins the goal.




(Drawing by Holmes.)

TYPICAL PORTAL COLUMN OF THE TEMPLES OF CHICHEN ITZA.

At the open ends of the court formed by these two walls stand temples, which in effect inclose the area, definitely marking its boundaries. On top of the east wall, at its southern end, there is a beautiful temple, which affords a commanding view of the entire court. This has been called "The House of The Tigers," because of a frieze of stalking tigers, which is sculptured in alto-relievo around the outside of the building. This temple contains also on the walls of an interior room, an elaborate mural painting representing an attack by some enemy upon a city, perhaps Chichen Itza itself, and its defense by the inhabitants. Some of the poses taken by the combatants in the conflict are extremely realistic; such as in the throwing of javelins, the swinging of war clubs, and the like. This bit of mural decoration in The House of The Tigers at Chichen Itza probably marks the high-water mark of aboriginal painting in the

Western Hemisphere; at least it is superior to everything else that has survived.

The identification of these two great walls and the temples associated with them, as a Ball Court, rests on firm historic foundation. When the Spanish first came to Mexico they found the natives playing a game of ball, which was of sufficient importance to have a special court or ground set apart for its exclusive use. Several of the early Spanish writers have described the game in some detail, and all agree as to its having played an important part in the life of the people. One chronicler has it that the object of the game was to strike the ball so that it would pass through the opening in the stone ring above mentioned as an important feature of the Chichen Itza



(Photo by Maudslay.)

STONE RING BROKEN FROM THE WALL OF THE BALL COURT.

court. He adds that the feat was one of considerable dexterity, since the ball could not be hit with the hands, but that the hips or other parts of the body had to be used instead. This rule of the game very materially increased the difficulty of making a "Maya basket;" so much so, in fact, we are told, that the lucky player making this winning stroke had forfeit to him as a reward for his skill all the clothing and ornaments of the spectators. At such times, the chronicler concludes, the spectators were wont to scatter in all directions without loss of time, hoping thus to escape paying the penalty, but that the friends of the lucky player immediately gave chase and endeavored to exact the full forfeit.

Although the name Ball Court has been given to this group of temples at Chichen Itza, it should not be supposed on that account, that this great court was built primarily for sport. Such an explanation of its fundamental purpose is incompatible with any conception which the American aborigine ever seems to have entertained. To the Itza people the chief function of their Ball Court was doubtless a religious one. Games played there, if not actually held in connection with religious festivals, were at least sufficiently religious in their meaning as to completely overshadow the element of sport as we understand the term. That a game was played in which competition and skill entered in can not be doubted in the face of contemporaneous evidence, and to this extent perhaps the Mexican Ball Courts were athletic fields; but it must not be forgotten for a moment that its true significance was religious, and that the games which were played there probably were held only in connection with religious festivals. It is not improbable, however, that the Aztecs were breaking away from the religious feature of sport at the time of the Spanish Conquest, but that "The Holy Men of the Itzas," as the people of Chichen Itza are sometimes called in the early manuscripts, had taken any such a radical step is little short of inconceivable, so religious in character was the whole Maya civilization.

To the east of the Castillo lies a great group of courts, pyramids, and collonades, "The City of a Thousand Columns," already mentioned. Here desolation is widespread. It seems as though an earthquake must have shaken the Itza capital at some time.

Row after row of columns have been overturned and now lie prostrate within a foot of their original positions. Perhaps a capital or a drum here and there is broken, but for the most part the stones lie just where they fell. In its entirety this section of the city must have presented an imposing appearance, being literally a forest of columns surrounding and connecting the various courts. As to the use of these great collonades, tradition and history are equally silent. Some think that they were the law courts of the ancient city, where justice was administered and punishment meted out. Others say that they were the market places, where the produce of the surrounding country was bought and sold. This latter explanation has one strong recommendation in its favor in that the descendants of the builders of the ancient cities of Yucatan, the present Maya Indians, still hold their markets under the portals surrounding the plazas in the towns and villages throughout the country to-day.

Leaving the Castillo behind and turning southward, the Cenote Grande, or waterworks of the ancient city, is reached in a couple of hundred yards. The sides of this great hole are perpendicular and in places undercut. Access to the water, which is some 70 feet or more below the surface of the ground, was gained in former times by means of a



Photograph from W. P. Young, Progreso, Mexico.

FRONT VIEW OF TEMPLE CALLED CHICHANCHOB (RED HOUSE.)

masonry stairway down one side which, in places, had to be carved from the solid rock. A ledge at the bottom forms a wide step, from which the water carriers filled their jars. Never in the memory of man has this cenote run dry. Its supply of water, fed by unknown subterranean sources, is seemingly inexhaustible. To this permanence



(Photo from W. P. Young, Progreso, Mexico.)

BUILDING CALLED THE IGLESIA, OR CHURCH.

and abundance of the water supply, no doubt, is due no small part of the power, which Chichen Itza enjoyed in pre-Columbian times.

South of the Cenote Grande there are a number of well-preserved structures, most of them presenting beautifully sculptured façades. To these, fanciful names have been given, which probably have little or nothing to do with the original uses of the buildings. One large



Photograph by Maudslay.

PORTAL OF THE TEMPLE OF THE TIGERS, BALL COURT. (FRONT VIEW.)

The carved wooden lintel is so dark as to be nearly invisible.

structure, for example, has been called "The Akabtzib." The name is Maya and means "The House of the Dark Writing." This building was so called, because of the fact that over one of its interior doorways there is a lintel inscribed with hieroglyphs. This lintel is so placed that the hieroglyphics can only be seen by artificial light,



(Photo by Maudslay.)

PORTAL OF THE TEMPLE OF THE TIGERS BALL COURT.

(*a*) Left jamb. (*b*) Right jamb. Carved wooden lintels above.

hence the name, "The House of the Dark Writing." Nearby is a round tower, with but one exception the only structure of its kind in the Maya area. This is called "The Caracol." Caracol is the Spanish word for snail, and since the interior circular corridor and the spiral stairway of this structure bear some remote resemblance to the convolutions of a snail shell, the name was applied to the building.

These are good examples of the naming of ancient structures throughout the Maya area. Some fancied resemblance, far-fetched as it may be, usually gives the local name at least by which the structures are known. The Monjas (Spanish for monastery) is perhaps the most beautiful building at Chichen Itza. It is composite, showing three different periods of construction.

The main structure rises from a platform 35 feet above the level of the ground, and is reached by a broad but steep stairway 55 feet wide on the north side. The lintels of the doorways leading into the front rooms of this building are carved with hieroglyphics. From its beauty, size, and commanding position some have conjectured that the Monjas was the seat of the civil authority at Chichen Itza, the palace perhaps, as the Castillo was the center of the religious life. Below on the ground level, abutting against the pyramidal platform of the main structure on its east side is the east annex of the Monjas, presenting the most elaborately sculptured façades in the city, and, according to some, in all Yucatan.

The above are only a few of the many structures at Chichen Itza. Lack of space prevents a full description of the site here. But in all directions for several miles the bush is strewn with ruins. Crumbling walls and jungle-ridden courts are to be encountered on every side: disintegration so far advanced that these once splendid palaces and temples are now but little more than shapeless mounds of fallen masonry. The total area covered by ruins which may be assigned to this center of primitive population has been estimated by some as high as 10 square miles. That larger Maya cities yet remain to be discovered now seems highly improbable so thoroughly has the general exploration of the area been done. Consequently we may affirm with but little hesitation that "The Holy City of the Itzas" was the largest and most important city of the Maya civilization and probably of aboriginal America as well.

# YERBA MATE--PARAGUAYAN TEA[a]

"¿TOMA *usted mate?*" is almost a form of greeting, in many parts of South America. Below the coffee belt, that is, any place south of the State of São Paulo in Brazil, on the Atlantic side, but away up through Bolivia and Chile on the Pacific side, the drink prepared from the *Yerba Mate* is almost universal among the people of "the camp," as the country is usually called in that part of the world. In the large cities it is a very popular drink, but only among the working people. Mate is not served over bars or in the restaurants, as a purchasable article; in fact, it could not be so sold, as will appear later, nor is it found as a refreshment among the gayer classes of society, yet those who know life well on the southern continent know that in the quiet of many an aristocratic home the *bombilla* and the *mate* are constantly used by those who grew accustomed to the effects of Paraguay tea while they lived, earlier in life, far removed from the luxuries of modern civilization.



LEAVES OF THE ILEX PARAGUAYENSIS.

Their color is a bright green, and, seen at a distance, the shape of the tree and the character of these leaves make a picture very similar to the more familiar orange tree.

During one of my trips to South America—

a traveler has said—

I had the good fortune to be compelled to wander clear into the interior of the Brazilian State of Rio Grande do Sul. I camped, ate, and slept with the German settlers, but of course I was thrown intimately into association with the native Brazilian as well. With the colonists, beer was an easily obtainable beverage, every

[a] By Albert Hale, of Pan American Union Staff.



Photograph by Harris-Ewing.

ILEX PARAGUAYENSIS.

Yerba maté plant in the patio of the Pan American Union Building, indicated by ✠.

town of noticeable size having its local brewery producing a cheap and palatable beverage. In "the camp," on the other hand, beer was less and less in evidence, the farther away I ventured from the beaten path. For the noonday luncheon, when, hot and tired, we rested under a huge fig tree, my guide and companion drew out from the recesses of the wagon a large jug, which, he told me, was filled with cold *mate*. "It's the best drink in the world," he added, "for the traveler; it has no alcohol, it satisfies the thirst most pleasantly, it has no bad effects, and as it must be prepared by boiling, there is no danger from bad water such as unfortunately is what we get hereabouts." So I drank the liquid out of the jug, and, when once I got accustomed to the somewhat bitter and herby taste, I enjoyed it. The same experiences were confirmed throughout Uruguay and Argentina.

He continues:

*Mate* is also the drink and the pledge of hospitality all over the country districts. When I arrived in the evening at some small village inn, I found that the first act of my companions was to go to the general kitchen, where there was always a kettle of water kept continually boiling on the fire; every one made free use of this water, taking his own utensils and his own bag of powdered *mate* from his pocket, and mixing his own brew as might suit him. The ranchman, the cowboy, the stage driver, the stableman, and the passenger on horseback or in the diligence, all lounged about the room, sucking *mate*, and no matter what the hour, day or night, the kettle boiled and some frequenter of the inn could be discovered preparing his own refreshment.

When I stopped for a short rest at a cottage on the way, almost the first act of the man who received me would be to charge his gourd with fresh powdered *mate*, then to fill it with the always ready boiling water, take a suck himself and then pass it to me; after I had sampled the decoction, the wife had her turn and all the other members of the family. To refuse to partake in this sincere act of welcome, was to give offense, but I confess that it was unpleasant to put into my mouth the unclean tip of the pipe-like stem through which the *mate* drink was sucked. Except in these circumstances I grew to like *mate*, and even use it now, long after my return from South America. The old, old native keeps alive on *mate;* the German colonists find it good, and it displaces beer in their daily habits; the Italian settler in the city or on the farm rapidly acquires the *mate* habit; the Spanish immigrant drops his high-priced wines and is as well satisfied with the nonalcoholic *yerba*, and even the north European peasant, beginning a strange life in this newest of new worlds, draws contentment and refreshment from this wonderful weed of South America.

*Yerba mate* (or Herva matte, as the same article is spelled in Brazilian Portuguese) is altogether indigenous to a well-defined area of South America. The aboriginal Indians of the basin of the Rio de la Plata, the Guarani, knew and used the plant long before the invasion of their country by the Spaniards. When these Indians were subdued, especially by the Jesuit missionaries, and this movement is of itself a fascinating chapter in the history of South America, they were found to be using a drink made of a plant that grew wild and abundant over the subtropical regions in which they lived.

*Caá* was the name given to this plant by the Guarani. *Caá* means simply weed, and the Europeans, translating literally, called the plant *yerba*, a word similar to the English "herb," with which it is etymologically allied. *Caà guazù*, the still more specific Guarani term, means "big or splendid weed." The *mate* is the dried gourd,



CARRYING BRANCHES OF YERBA.

The yerbateros are hard working, and stick to their tasks with admirable endurance. They enjoy themselves, however, and occasionally have competitive trials of strength among themselves over the weight of the loads they can carry.

hollowed out, with an aperture where the stem used to be, into which the crushed leaves are placed and into which the boiled water is poured; from the *mate* the decoction is sucked through a hollow tube, called a *bombilla* (little pump), at first and at times even now made of a reed or bone, but usually fashioned from metal with a perforated, spoon-shaped expansion at the extremity inserted into the *matè*.[a] By habit the container implied also the thing contained, so that *mate* is also what is sucked from the *mate* in which it is prepared.



(Courtesy of Senor Alfonso Guerdile. Buenos Aires.)

THE YERBA GATHERER IN THE FOREST.

The native who gathers yerba is called Tarifero or Minero. He prunes the branches with a machete, and a good workman seldom does harm to the tree, so that it bears again if no other accident happens.

*Yerba mate* is, therefore, directly translated, only a drink made out of an herb. The word *mate* is sometimes applied to plants in Cuba and Mexico of the leguminous family, with no recognized connection. Botanically the plant from which the drink is made is a holly, *ilex*, a genus of trees belonging to the order *ilicineæ*. The holm oak is embraced in this order. Others of the genus ilex grow in many parts of the world, preferring a temperate or a subtropical climate.

The *ilex paraguayensis* is the South American holly, growing spontaneously in the four Brazilian States of Parana, Santa Catherina, Rio Grande do Sul, and Matto Grosso; in the northeastern region of Argentina, and especially in all the eastern and central parts of Paraguay. It is an evergreen tree or shrub about 12 to 26 feet (4 to 8 meters) high, very bushy and beautiful, from a distance resembling an orange tree. It has no prickles or spines. The leaves are a bright green, the yellowish flowers being insignificant, and the tiny berries are a purplish black. Some of the specimens are better than others,

[a] The accent does not belong over the "e." It is normally superscribed by the French, to indicate that the word has two syllables, and is retained in English for the same reason. The correct pronunciation is with the emphasis on the first syllable, "a" being long, as in father, "e" being like "a" in pay.

the one preferred as giving the best quality of tea leaves having a very small leaf of a dark green shade. The fruit is attached by a short stalk to the branches; it contains a soft pulp with hard seeds, which, if left exposed for a few days, become so hard and dry that they can be cut only with sharp instruments. The Indians originally did nothing but gather the leaves from the trees in the forest, depending upon the natural source for additions to their supply, but the Jesuits devised a means to replenish the trees by cultivating them from the seed—a method for a long time lost to the agriculturist, as the holy fathers had kept the secret to themselves. Recently, however, it has been found that the provision of nature by which the plant was propagated was chiefly through the digestive tract of birds, where the intestinal juices softened the seed's shell so that it would the more easily germinate.



(Courtesy of Senor Alfonso Guerdile, Buenos Aires.)

CARRYING THE BRANCHES OF YERBA MATE TO THE DRYING HUTS.

After gathering yerba, the tarifero collects the smoked branches into a bundle of 60 to 100 kilograms (kilo=2.20 pounds), and carries it to the barbacuá, in which the next process is completed.

This process of maceration has been copied by chemical means. Seeds properly treated can be then planted and will grow young sprouts. Thus the modern gardener starts his orchard (for orchard means weed yard). Although almost all *yerba mate* is still taken from the immense natural forests of the region mentioned, plantations have been successfully laid out and crops of leaves have recently been gathered with commercially profitable results.

Collecting the leaves is nevertheless, as a rule, conducted in the same way that was characteristic of the industry centuries ago. It is a native method differing little in its details, either in Brazil, in Argentina or Paraguay. A description of the way the natives work, from an old travel book of more than seventy years ago, will, for the most part, give a vivid picture of what is going on to-day in all that part of South America, excepting where better roads have been constructed into the interior, a more enlightened system devised by the owners or

lessees of the *yerbales* (woods of the yerba trees), or quicker processes demanded by the march of industrial civilization.

At dawn of day the peons were at work, making preparations for the manufacturing and storing of the *yerba*. One little band was constructing a line of wigwams for habitation, overlaying them with the broad leaves of the palm tree and of the banana. Others busied themselves in the construction of the *tatacua*.

This is a small piece of ground, about 6 feet square, of which the soil is beaten down with heavy mallets till it becomes a hard and consistent foundation. At the four corners of this space, and at right angles, were driven four very strong stakes, while upon the surface of it were laid large logs of wood. This is the place at which the leaves and small sprigs of the yerba tree when brought from the woods are first scorched,



(Courtesy of Senor Alfonso Guerdile, Buenos Aires.)

A BARBACUÁ FOR PREPARING YERBA.

The first consideration in the treatment of the mate is to effect its cure, as it may be called, by scorching immediately after the branches and leaves are collected. The method is primitive, but very successful if properly carried out.

fire being set to the logs of wood within it. By the side of the *tatacua* is spread an ample square net of hidework, of which, after the scorched leaves are laid upon it, a peon gathers up the four corners and proceeds with his burden on his shoulders to the second place constructed, the *barbacuá*.

The *barbacuá* is an arch of considerable span, and of which the support consists of three strong trestles. The center trestle forms the highest part of the arch. Over this superstructure are laid crossbars strongly nailed to stakes on either side of the central supports, and so form the roof of the arch. The leaves being separated, after the *tatacua* process, from the grosser boughs of the yerba tree, are laid on this roof, under which a large fire is kindled. Of this fire the flames ascend and still further scorch the leaves of the yerba. The two peons beneath the arch with long poles take care, as far as they can, that no ignition shall take place; and, in order to extinguish this when it does occur, another peon is stationed at the top of the arch. Along both sides



Courtesy of Señor Alfonso Guerdile, Buenos Aires.

POUNDING THE YERBA LEAVES.

The leaves in their natural size are too coarse for packing or for use in making tea. They are therefore submitted to treatment like that given to grain by an old-fashioned flail, by which they are reduced almost to a powder.

of this there are two deal planks, and with a long stick in his hand the peon runs along these planks and instantly extinguishes any incipient sparks of fire that appear.

When the *yerba* is thoroughly scorched, the fire is swept from under the *barbacuá* or arch; the ground is then swept and pounded with heavy mallets into the hardest and smoothest substance. The scorched leaves and very small twigs are then thrown down from the roof of the arch, and by means of a rude wooden mill ground to powder.

The *yerba*, or tea, is now ready for use, and being conveyed to a large shed previously erected for the purpose, is there received, weighed, and stored. The next and last process, and the most laborious of all, is that of packing the tea. This is done by first sewing together in a square form the half of a bull's hide, which, being still damp, is fastened by two of its corners to two strong trestles driven far into the ground. The



(Courtesy of Senor Alfonso Guerdile. Buenos Aires.)

A BARBACUÁ AND THE YERBATEROS.

The yerba gatherers bring in the leaves to the prepared ground where they receive their first scorching. The Cancha is the space adjacent, where the leaves are thrashed into powder for final consumption.

packer then with an enormous stick made of the heaviest wood, and having a huge block at one end, and a pyramidal piece to give it a greater impulse at the other, presses, by repeated effort, the *yerba* into the hide sack till he gets it full to the brim. It then contained from 200 to 220 pounds, and being sewed up and left to tighten as the hide dried, it formed at the end of a couple of days, by exposure to the sun, a substance as hard as stone and almost as weighty and impervious.

These processes are in part carried on about the same time as the gathering of the *yerba* itself, and indeed the preparation of the drying sheds is usually completed before the peons go into the woods. Gathering *yerba*, which takes place in dry weather, is, however, the first step, as far as the history of its march from the forest to the

consumer is concerned, and might perhaps have been described earlier. But only when the *yerbateros* are satisfied that *tatacuas* and *barbacuás* are ready do they start out from the temporary colony. two or more, but seldom singly.

The *yerba* gatherer carries only a small axe, the simplest of provisions, and sufficient water. His desire is to find the plants as near as possible to the camp, so as to accomplish results immediately. The trees are of all sizes, from a shrub to the height of a full-grown orange tree, but the smaller the plant the better is the tea made from its leaves. They grow irregularly, sometimes only a few to an acre, scattered throughout the general forest, or again they may be found



(From an old engraving in a book of travels over Paraguay, published in England, 1839.)

PROCESS OF PREPARING THE YERBA.

The leaves and small twigs are first smoked and even scorched in a place where they are exposed to a fire smoldering beneath them. This is called a tatacua.

in numerous clumps, from which a bounteous harvest is easily obtained.

When cutting begins it is continued until a mountain of branches is collected and piled up in the form of a haystack. The peons then fill their *ponchos* (large capes with a central aperture through which the head is thrust) and hurry away with their loads. Having deposited these burdens within the colony they return for another, and so on until they have cleared all the branches and leaves cut during the day. For each *tatacua* and *barbacuá* there is a pile of *yerba* ready for manufacture.

Then the smoking, or, as it is called in more elegant language, the torrefaction, begins and lasts for about three days, the native skill,

based to a great extent upon tradition, being trusted to decide the proper moment when the leaves have reached the exact degree of dryness for preparation into powder. Twenty-four hours is probably the minimum time for exposing the leaves to heat.

The first discovered inhabitants of this portion of South America were known to prepare their drink from the indigenous *yerba*. They taught the exploring Jesuits the use of it, and upon its cultivation and exploitation by these missionary fathers was built an entire civilization, gentle and benevolent to some degree and not to be decried without careful analysis of methods and results, but in the




(Courtesy of Senor Alfonso Guerdile, Buenos Aires.)

A FOREST CAMP OF YERBA GATHERERS.

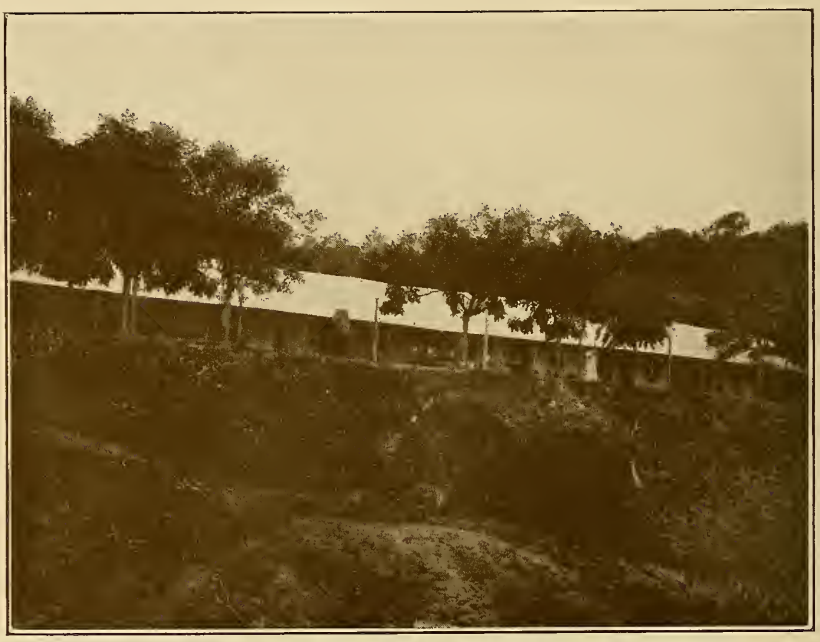
Here those employed in collecting the plants and in preparing the leaves for market, make their home for the time being. Near them are the barbacuá, and the ñoque (storehouse of yerba). The capataz is the head man who has charge of the entire work; the escribiente is the bookkeeper; the secador is the technician upon whose judgment depends the delicate operation of drying and scorching the leaves, to bring out the best that is in them. (1) Food storehouse; (2) working material; (3) yerba depository.

main harsh and restrictive. The Jesuits isolated the natives and thought to develop them in an unworldly way. They built towns and churches; they had a hierarchy of their own; their system of communal living was agricultural, and they brought their *yerbales* to a high degree of cultivation. When the Jesuits lost their power, the secret of this cultivation of the Paraguayan ilex was lost. The natives lapsed into the primitive habit of gathering and preparing the *yerba*, so that the crude methods described are characteristic even to-day of the manner by which the tea reaches the present market.

Modern energy and thrift, however, have simplified and systematized many of these methods. Where the wildest of country bridle

paths were the only means over which the product could be transported, there are now in some instances decent roads available, so that part of the initial cost is reduced. Improvements have taken place in other directions, and as a business there is every prospect that the routine side of gathering *yerba* has become and will in the future be very much more economically administered.

The most encouraging advance, however, and one that will in the long run influence every other step in *yerba* production, is the fact that the old Jesuit secret of cultivation has been revived, and the



(Courtesy of Senor Alfonso Guerdile. Buenos Aires.)

WAREHOUSES FOR THE YERBA.

Here is stored the accumulated stock of maté, held in readiness for shipment. Women's quarters also are provided, and accommodation for the mule teams is ready. Numbers of such buildings are found on the banks of the Parana River, where much of the yerba is collected for the consuming markets, Buenos Aires being the largest.

principles of modern agriculture applied to it. Devising a chemical substitute for nature, practical men have succeeded in softening the stonelike seeds, in rendering them free from injurious infective agents, and in preparing them for speedy and healthful germination.

This method of planting gives better results than the proposed plan of raising the tree from shoots, as the young shrubs do not stand this violence well, although the hardy ones may live. Neither will older trees yield to transplantation, since the taproot is so long that a lasting injury is caused thereby.

Planting, however, needs particular care. *Yerba* trees demand abundant shade at first, and therefore forest land must be selected in which to sow the seed. These are allowed to sprout in apparent wildness, beneath the shade-giving trees; gradually the roof of branches and vines is thinned away, as the *yerba* trees acquire strength, until they are left exposed by themselves to the full air and light. Good results have been obtained, too, by using the rapidly growing castor-oil shrub, which affords protection and takes the place of the forest, as long as it is needed. One change is thus noteworthy: In the forest, the shrub growing wild becomes drawn upward in order to reach the light and



MATÉ GATHERING, AT A FOREST DEPOT, PARANA.

The mode of living and the habits of the yerbateros differ only slightly in all parts where the maté grows. These huts and skins of the prepared tea are seen in Brazil as well as in Paraguay.

air; in the more open plantation it becomes quite bushy. This is an advantage in favor of cultivation.

Another gain for scientific agriculture of this kind is the fact that the *yerba* tree can be accustomed to different soils and to a lesser degree of moisture. Left by nature to select its own habitat, the *yerba* prefers the low shores of rivers and a bed in which water is supplied with superfluous liberality. But if from earliest growth it is made accustomed to a fairly dry situation, in ground well drained by nature or art, it flourishes admirably there and needs no watering.

The immense forests in southern Brazil, Paraguay, and the Argentine Mesopotamia (chiefly the Territory of Misiones) furnish the world's supply of the *yerba*, but cultivation is beginning to add its proportion, and it is more than probable that, within a few years,

especially since the increased popularity of this drink and the determined efforts made to give it a foreign vogue, there will be a steady growth in the cultivation of Paraguay tea.

What is Paraguay tea? For this is as logical a name as any. The word *mate* is general, in Spanish and Portuguese, and can not be displaced, but in English it does not convey a clear idea of the drink itself, and that is the only distinctive feature about the *yerba.*



YERBA MATÉ READY FOR TRANSPORT.

The yerba after the drying and thrashing processes, is compressed into skins or bags, weighing about 200 pounds. These are then carted or more frequently carried on mule back 15 or more leagues (35 or more miles) to the nearest point of shipment. Good roads through the woods would reduce the labor and cost of the tea very considerably.

The drink called Paraguay tea is made from a plant grown chiefly in the republics of South America, called *yerba mate.* It is prepared by placing in a hollowed receptacle called a *mate* two or three spoonfuls of the powdered leaves, with sugar or lemon or other condiment, and by pouring boiling water upon it. After steeping a few moments it is sucked through a tube called a *bombilla,* which admits the liquid but keeps out the powdered tea. The process may be repeated ad libitum. The natives, as well as those habituated to the tea,

drink the decoction at all hours of the day and night, and from it comes, in fact, practically all the liquid nourishment required by the body for its physical well being.

A reasonable and quite impartial estimate places the number of drinkers of Paraguay tea at about 10,000,000 persons in South America, and it is stated, moreover, that the supply frequently falls short of the demand. The yearly consumption per capita of this *yerba* is given as being in Chile, 51 kilograms (112½ pounds); in Bolivia, 2.50 kilograms (4½ pounds); in Argentina, 9 kilograms (20 pounds); in Uruguay, 10.02 kilograms (22 pounds); in Paraguay, 15.73 kilograms (34 pounds); and even in the Brazilian State of



THE MATÉ AND THE BOMBILLA.

The maté is the usual name for the hollowed gourd from which the yerba maté (Paraguay tea) is drunk. Colloquially, the word cuya is also frequently heard. The bombilla is the tube, of bone, reed, or metal (principally the last) through which the tea is sucked. The expanded end serves as a spoon, and the perforations in it are so small that the powdered leaves can not be drawn into the mouth. These utensils are sometimes made in very elaborate designs, and of precious metals.

Parana, from which come great quantities of *mate*, although it is near the coffee-growing center of the world, the annual per capita consumption is 20 kilograms (44 pounds), a demonstration of the profound influence the habit makes upon the European immigrant even from the northern portion of that continent, for Paraguay has a relatively large proportion of Germans and Poles among its colonists.

The explanation of this spreading popularity is not hard to find. The human race is essentially devoted to habits, and one of the most persistent of all habits is the demand for and unceasing indulgence in



A HAPPY COLONY AT A RAILROAD CONSTRUCTION CAMP IN PARAGUAY DRINKING MATE.

Natives of an immense area of South America drink maté, but even European colonists acquire the habit after short residence in the country. The picture shows the tea cans from which the maté is taken, the kettle of boiling water, and several persons sucking bombillas.

a stimulant. Many native peoples have stumbled upon a drink containing a poison like opium or alcohol, occasionally to their complete undoing. Others have found in their home plants a principle that satisfies this craving, while at the same time producing mere mental exhilaration, bodily comfort, and refreshment, with no subsequent organic or physical destruction. Among the former, and therefore dangerous, excitants are opium, probably coca, although it is not yet proved that coca leaves are at all as harmful as the infinitely more concentrated cocaine, hasheesh, pulque, rum, and other products of the sugar cane. Among the latter are tea, originally from the




COMMERCIAL PACKAGES OF YERBA MATÉ.

In any city or town where Paraguay tea is drunk, the powdered leaves of yerba can be bought in tins, boxes, or simpler containers. Some come from Brazil direct, but most of the supply, reaching Buenos Aires in great bundles, is repacked there for the retail trade. These packages weigh from 2 to 10 pounds.

Far East (China), coffee from Abyssinia and Arabia, and chocolate (cocoa) from Mexico in North America.

With tea and coffee the Paraguayan *yerba mate* has much in common. Chemical analysis shows that, in addition, of course, to the essential oils, chlorophyl, resins, and other vegetable ingredients, it contains both tannin and caffein. Of tannin the proportion is decidedly less than that estimable in both green and black teas and falls short of the amount in coffee; of the other alcoloid, known as caffein, thein, or in this case sometimes given the name matein, the proportion is less than in the teas, but approximates the amount

contained in the coffees. This amount of caffein is given in various analyses as from 1 to 2.50 per cent, according to the leaves furnished.

The caffein, then, is the active principle that gives to Paraguay tea its sustaining quality, and the small quantity present in it accounts for its unquestioned virtues. "The slight amount of caffein in Paraguay tea, and especially the almost infinitesimal amount of essential oils compared with tea and coffee, explain fully the dietetic and physiologic advantages of the drink." It does not irritate but it soothes the nervous system, and this accounts for its historic and contemporary use among the Indians, plainsmen, cowboys, natives, and European colonists.

All observers agree that Paraguay tea does have a beneficial effect on those who take it, either on rare occasions when circumstances are such that a harmless stimulant (perhaps narcotic is as good a word) is craved, or habitually, as do the natives of the immense area of South America already mentioned. A simple reason for its physiological benefits is put out by a German who has observed that the natives of certain parts of this region who are excessive meat eaters, are the very ones most addicted to *mate*, and that the drink largely takes the place of the vegetables that should really be a noticeable proportion of their food. It seems, too, to be especially suited for a drink in tropical or semitropical countries, for it does not irritate the digestive tract like coffee and tea, but at the same time it supplies the quantity of fluid which the body needs to compensate for excessive perspiration.

Almost endless are the physical infirmities for which, according to claims of enthusiasts, the Paraguay tea is of value. It is not necessary, however, to mention them or to examine the justness of these claims. That the drink has no deleterious effects, either immediate or after prolonged use, is acknowledged by all. That efforts to make the drink popular beyond the area in which the *yerba* grows, are worthy of support, should not be denied by impartial students of social phenomena. It is interesting to note that many years ago a propaganda was begun for popularizing this tea, but fortune interfered with its furtherance. President Lopez II (about 1865) sent a shipload of the *yerba* from Asuncion to the King of Prussia, but the result has never been accurately stated. It must have been unimportant, however, and the disastrous war of Lopez put an end to his ambition for foreign activities. Troops in China and in Africa have been supplied with it, but there seems to have been no spontaneous acceptance of the drink, because, in all probability, their diet craved no stimulant beyond what the appetite already had.

Nevertheless, *mate* has become slowly recognized outside of South America, as the acceptance and commendation of *yerba* pills, *yerba* beer, etc., bear witness. The unadulterated, or as the pharmaceutists

would say the unsophisticated, *yerba mate* leaves ready for the preparation of tea or some such drink are what deserve and will finally receive popular approval. The tea can be drunk either cold or hot, as the traveler quoted in the opening paragraphs testifies. Hot, it can grace the tea table and be served in all the ways so well known in the consumption of Japan tea. Cold, it offers a fine drink for excursions, for picnics, or the thousand and one requirements of daily life. It might even add one more to the attractive offerings of the American soda fountain, for the traveler who knows his South America can well imagine many a drink more harmful than Paraguay tea and no more attractive. It is reported that in England a company has been formed to extend the use of *mate;* returning Italian and German settlers in the River Plate region insist on importing for their own use their beloved tea, and soldiers in European armies, even if they have previously had no practical experience with the drink, take kindly to it as soon as they note its cheapness and healthfulness.

But the pampa style of drinking the tea will not popularize it. The old method of selling it has become more refined and hygienic. In the markets of those countries where its sale it most extensive, it can be obtained put up in attractive, clean, sealed cans or receptacles as impervious as the most Government inspected article in the United States. Its tastiness is actually enhanced when served in a cup or glass, and the decree of fashion is all that is lacking to make Paraguay tea as eagerly desired as was Bohea 300 years ago. It is very cheap, too, its cost in Buenos Aires being only about 7 cents a pound, and even in New York it can be obtained at about 9 cents a pound.

The increase in amount gathered is a fair test of the hold the tea has in the affection of its consumers. In 1726 the harvest report was no more than 625,000 kilograms (1,378,000 pounds) for all of South America; in 1905 it had reached the total of 100,000,000 kilograms (2,246,000 pounds); in 1909 the estimated production was 105,000,000 kilograms (2,314,850 pounds). Argentina, Bolivia, and Chile import the powdered leaves, Paraguay and Brazil export, although both the latter countries are also enormous consumers, and both the former might cultivate the tree. In fact, Argentina has already taken this step, and the plantations are promising remarkable success. France is the European country importing most *yerba,* followed by Germany, Italy, Spain, and Portugal, and it is commercially on sale in England. It must not be said that the United States is the last to appreciate the excellence of the Paraguay tea.

# A TRIP AROUND SOUTH AMERICA[a]

TO the average traveling American who has become more or less accustomed to the grand tour of Europe a trip around South America will come as a delightful surprise. In a relatively short space of time he will experience every variety of scenery, climate, and peoples, from the luxuriantly wooded hills of Brazil to the bleak and barren giants of the Andes; from the continual summer heat of most of the coast towns to the cold and rarefied atmosphere of the lofty plateaus; from the refined and cultured peoples of the capitals to the rude natives of the interior.

The journey round the southern continent can be started either on the west or the east coast. A salesman with a quantity of valuable samples might find it would pay him to work the west coast first and leave Brazil till the last, because duties on such goods are refunded in all the other Republics. In Brazil he could dispose of his samples, and thus reimburse himself for his outlay. One who wishes to visit the Amazon district will also find steamboat connections better if he makes it the end of his journey, as he may join the Lamport & Holt steamer at Barbados, which port is only called at on the northbound trip.

The traveler who decides to start down the western side has the choice of several lines of vessels, offering excellent accommodation as far as Colon. Crossing the Isthmus by rail and catching glimpses of the canal under construction, connection will be made with steamers running all the way down the coast and the voyager be brought to his first very important stopping place, Callao. Most persons will probably wish to first visit Lima, the capital, which is only a few miles inland from the seaport of Callao, although a considerable importing trade is done in the northern towns, such as Piura, Cajamarca, and Trujillo.

The seaport of Callao is one of the most important on the west coast and may be considered safe in all weathers. Many vessels go alongside the wharf, although the Pacific Mail steamers from Liverpool anchor out in the bay.

Lima, besides being the principal business city in the Republic, will interest the visitor on account of its historical associations; its cathedral, containing the bones of FRANCISCO PIZARRO, will recall the daring exploits of the conqueror and the romantic story of the

[a] By REGINALD GORHAM.

downfall of the Incas, while the numbers of other churches, several of which are over 300 years old, are both beautiful and interesting.

Peru is an attractive field for the American exporter. The country imports nearly all manufactured articles and a large proportion of other supplies, although it is so rich in natural productions that in certain lines, notably in textile goods, the completed article is turned out from the raw material. There are seven textile factories in Peru, representing a capital investment of $2,000,000 and employing over 1,500 hands. Although on this account the importation of cotton goods from the United States, Germany, and Great Britain has considerably diminished, the standard of employment has been raised and a demand created for more highly specialized manufactures than would be used by a purely agricultural community. There are also some establishments for the manufacture of matches, paper, cigars and cigarettes, biscuits, lard and cottonseed oil, besides flour mills, breweries, tanneries, etc.




GOOD AND BAD PACKING AND MARKING.

The large case is an example of solid packing and proper marking. The three smaller boxes on top are poorly packed and improperly marked.

From Lima, a trip over the Oroya Railway, one of the wonders of the world, will bring one to the mining district, of which the Cerro de Pasco Mining Co., an American concern, is the most important enterprise. Practically every mineral substance is found in Peru, and the deposits of gold, silver, and copper are probably unequaled in richness anywhere else in the world.

No one should allow himself to be dissuaded from visiting the high table-land in Bolivia, as the journey can be accomplished without

difficulty or inconvenience, and the scenery is such as to amply repay one for the time spent.

Leaving the boat at the Mollendo, the train will be taken as far as Arequipa, about six hours' journey. The railroad soon begins to enter the mountains, and before long a wonderful panorama is spread out before one. Some patches of vegetation are noticed amongst the dreary brown of the mountains, their greenness being accentuated by contrast with the barren nature of the ground in which they are situated. Fruits and flowers flourish in the soil which has been irrigated, and it is surprising to be able to purchase luscious oranges



A LOADED LIGHTER AT ETEN, PERU.

This type of lighter is used in many ports of South America for carrying freight from vessels to the docks.

at the small wayside stopping places, when the train is all the time passing through apparently sterile land.

Arequipa is situated 7,000 feet above sea level, and lies near the great volcano, Misti, which is flanked on one side by Chachana, and on the other by Pichu-Pichu, two other giants of the Andes. The rail journey may be continued to Juliaca and Puno, and from the former place a branch line runs to Cuzco, the ancient capital of the Incas. A visit to this place is naturally fascinating on account of the many monuments and relics of their ancient civilization. On the other hand, the journey to Bolivia may be immediately continued from Puno by steamer across Lake Titicaca, the highest navigable body of water

of considerable size in the world, being situated at an elevation of nearly 13,000 feet above sea level. One of the curiosities of the region is the "balsa," a boat made entirely, both hull and sail, of rushes. This type of boat is used exclusively on the waters of Lake Titicaca. The steamers which cross the lake are speedy, clean, and well appointed. They were, of course, put together on the spot and the parts conveyed by rail from the coast, although some were even running before the line was built, necessitating the carrying of everything on mule back. At this immense altitude some people are affected by nose bleeding, headaches, and a serious difficulty in breathing.

On leaving the steamer at Guaqui, in Bolivia, and continuing the journey by train, a section of country is passed through which has a more fertile aspect than the dusty mountains of Peru; rough cottages are dotted about and there are evidences that the population is generally scattered all over the district, instead of hugging an irrigating canal.



DISCHARGING GOODS AT ETEN, PERU.

Attention is called to the irregular stacking of the shovels. Unless solidly packed, they are often damaged by other freight piled upon them.

In a few hours the city of La Paz, the most important in the country, although not the capital, is reached. The train comes to a stop at a lonely station, with nothing in sight but an expanse of dusty desert, bounded by the distant snow-capped mountains; the steam locomotive is here detached and the train begins its journey down the steep slope into the city conducted by a trolley car at each end to work the air brakes, the locomotive being too heavy to descend with safety. Immediately after turning a corner on leaving the transfer point, the traveler can not help giving vent to a cry of amazement as a marvelous panorama is suddenly unfolded before his eyes.

La Paz lies in a hollow, and from the top of the hill the whole city appears stretched out like a map below him; the red and white of the houses is surrounded by a band of green fields, while above all stretches the mighty section of the Andes, beginning with Illimanni and culminating in the distance with Sorata.

The city has a great charm and fascination for one fresh from a more northern land, the queer dresses and customs of native Indians being sure to excite his interest to a high degree; the short and voluminous skirts of the women, their ornamental high shoes and hard white "derby" hats, all being peculiar to this part of the world.



THE BAY AT VALPARAISO, CHILE.

Valparaiso is the objective point of all Chilean commerce. Harbor and dock improvements are now under way at a cost of nearly $50,000,000.

The men on some feast days adorn themselves with fantastic costumes and masks, and will march through the streets to the accompaniment of the weirdest music. The llama is used in this part as a beast of burden, as also generally throughout the Peruvian and Bolivian table-land.

The traveler will leave this Old-World country with many regrets at not being able to study more closely the local customs than the limited time he will allot to it on a business trip will allow, and direct his way to the more completely modernized Chile. On the railroad journey between La Paz and Antofagasta, which can be made on a sleeping and dining car train once a week, he will notice evidences

of the great mineral wealth of Bolivia, and will pass the borax lakes and the nitrate of soda works, which are the principal sources of wealth of northern Chile.

During the sea voyage from Antofagasta to Valparaiso calls are made each day at the coast ports, the character of the land gradually increasing in fertility. Valparaiso, a busy and important town, bears but little mark of the earthquake that devastated it a few years ago.

A short ride on one of the well-appointed trains of the State Railroad brings one to Santiago, the beautiful and interesting capital of the Republic, and perhaps the most typically Latin-American of all the large cities of the southern continent. Concepcion, with the rising port and naval base of Talcahuano, is a good center for visiting the wealthy and prosperous agricultural district of southern Chile, all parts of which are quickly reached by rail.

The immense importance of the Chilean market to the American manufacturer will immediately be apparent to a business man visiting the country. He will recognize the necessity of catering to the special demands of the market, and will be especially impressed with the justness of the often-heard complaints of bad packing and marking of cases. One perhaps does not fully appreciate the need of using really strong wood to form packing cases until one has actually watched the operation of discharging cargo at any of the ports on the west coast of South America. As practically everything is discharged into lighters, the handling the goods receive is very severe, especially in a heavy swell, which seems to be the normal condition of an average Peruvian or Chilean roadstead. The business man will also have a chance to study the methods of handling cargo, and if he descend into the ship's hold will readily see the need of marking cases more clearly, as they have to be picked out by an uneducated stevedore, by the dim light, possibly, of a cluster of electric lamps suspended a considerable distance from them. It is a great complaint that American cases frequently miss their port of destination, as they are marked over with a mass of unnecessary words, such as the name and address of the New York shipper, which are generally stenciled over the cases in letters as large as those used for the name of the place for which the goods are bound. Such particulars should be on a pasteboard card in one corner, as they are not needed after the case leaves this country.

The journey to Buenos Aires will probably be undertaken by rail, as it is possible to avail oneself of the tunnel recently opened through the Andes, which, although adding greatly to the convenience of the journey and saving the long, cold, and stormy passage via the Strait of Magellan, unfortunately causes one to miss much beautiful scenery. The railroad traveler is also deprived of a sight of the statue of "Cristo Redentor," which was erected at the summit of the

Andes Pass when Chile and Argentina promised to maintain everlasting peace.

A day's run from Mendoza across the flat cattle-raising and wheat-growing plains of Argentina brings one to the capital, Buenos Aires. This city, founded in 1535 under the name of Santa Maria de Buenos Aires, on account of the salubrious breezes generally prevalent, soon became a center for commerce. For a time a smuggling trade was carried on through it in the way of handling products from and merchandise destined for Argentina, Chile, and even southern Peru, although in the early Spanish days such trade was prohibited, the



DENTAL OFFICE AT VALPARAISO, CHILE.

Throughout the cities of South America may be found such well equipped, up-to-date dental parlors.

home Government attempting to force a concentration of all business in Lima, the seat of the viceroyalty. Later on Buenos Aires became the point of assembly for the revolutionary factions, and has always since come to the forefront in any advance movement. At the present day it is the largest city in the Southern Hemisphere and worthy of comparison with any in the world in point of modernness, wealth, and business activity.

Its splendid docks are always filled with numbers of large steamers flying the flags of nearly every maritime nation in the world, although the Stars and Stripes are almost always conspicuous by their total absence.

The American manufacturer visiting Argentina will find in Buenos Aires and Rosario two thoroughly up-to-date towns and will be amazed at seeing what enormous quantities of goods are imported through them. They do not merely export wheat and wool and buy plows and thrashing machines; they offer a market for the sale of every commodity that would be used in the great capital cities of the Northern Hemisphere.

Montevideo, the flourishing capital of Uruguay, can be reached in a few hours from Buenos Aires either by river steamer or ocean liner, and although somewhat overshadowed by proximity to the larger



DOCK SCENE AT BUENOS AIRES, ARGENTINE REPUBLIC.

Buenos Aires, the largest port in South America, has a splendidly developed harbor front, equipped with modern docks, wharves, piers, etc.

city, is yet an up-to-date and well-arranged city with a large commerce. It is a port of call for many vessels that do not proceed up the river to Buenos Aires at all.

The journey northward can then be continued from Montevideo by any one of a large number of trans-Atlantic steamers as far as Santos (the principal port in the world for the shipment of coffee), and from there the train be taken to São Paulo.

This elegant city has a population of over 400,000, is an excellent business center, and on account of its considerable elevation above sea level, is blessed with a temperate climate, making it highly desirable as a place of residence. Close by is a large museum built to

commemorate the declaration of independence. This took place on the 7th of September, 1822, when on the banks of the little river Ypiranga, Don Pedro I. exclaimed, "Independencia ou morte!" and Brazil without fighting became an independent nation, although not until 1889 was the Republic formed.

São Paulo is a good point from which to visit the great coffee-producing lands in the interior of the State. Nearly all the coffee produced is shipped from Jundiahy to Santos over the tracks of the Sao Paulo Railway, although this line itself does not touch a single plantation. Two Brazilian roads, the Companhia Mogyana and the Com-



VIEW OF BOTAFOGO, RIO DE JANEIRO, BRAZIL.

In this section of the city of Rio de Janeiro are located some of the handsomest residences in Brazil.

panhia Paulista, bring all the coffee to Jundiahy, but have no outlet to the coast. The range of hills just back of Santos is very difficult to surmount, and the English railroad has had to build a series of inclined planes up which the trains are hauled by wire ropes moved by stationary engines. The earnings of the railroad have been very large, as it handles an immense quantity of freight and has spent little capital. The company have, therefore, put their excess earnings into the construction of unnecessarily beautiful depots and other improvements, as, by law, if their profits exceed 7 per cent, a decrease in rates would be entailed.

The natural resources of the States of São Paulo and Minas Geraes are boundless, to say nothing of the territory farther inland of Goyaz,

as yet but little opened. The climate is healthy, the people fairly strong and intelligent; school systems are being developed and modern conveniences in the way of long-distance telephones, steam railroad and automobile lines are tending to bring the people into a fuller realization of their opportunities. Individual enterprise by a few Americans has developed a number of well-equipped colleges scattered over various parts of Brazil. They form a powerful factor for good in the community and are useful as a medium by which the Latin Americans may understand the real attitude of this country toward the other 20 Republics.

The manufacturer's representative will find that it will pay him not to restrict his visit to the city of São Paulo, but to go by rail to a



STEAMSHIP "RIO DE JANEIRO" AT PERNAMBUCO, BRAZIL.

The "Rio de Janeiro" is one of the vessels of the Lloyd Brazileiro Steamship Company, a Brazilian company.

number of interior points. In Curytiba, Campinas, and Ribeirao Preto, at least, there are many merchants who import directly from Europe.

From São Paulo to Rio de Janeiro the journey may be made either by rail or by steamer via Santos. If by the latter route, the traveler will behold a marvelous sight on entering the bay; fantastically shaped mountains surround him on all sides in bewildering abundance, and snugly built at their very bases lies the beautiful city of Rio, the present capital of the Republic. The beauty spots and viewpoints in this earthly paradise are so numerous that one passes by without troubling to stop or take notice of panoramas that would make the fortune of many a less favored locality. Perhaps the best way to see Rio is by automobile, as the roads in the hills are excellent

and admirably suited for any power of car. The wonderful view of the bay and surrounding country which is obtained from the top of the Corcovado is certainly the finest thing of its kind in the world; the peak, which is 2,270 feet in height and is perpendicular for 1,500 feet on the southern side, is ascended to within a few feet of the summit by an electric rack railroad. A walk along the magnificent Avenida Central, with its gorgeous buildings and decorated sidewalks, out to the Avenida Beira-mar, a promenade five miles long skirting the bay, is a revelation to one who takes it for the first time. The graceful layout of the gardens and streets, the luxuriant vegetation, with the



SCENE AT THE DOCKS OF PARA, BRAZIL.

Para is a port of great commercial and industrial activity. Splendid new docks are now in process of construction.

peaks of Tijuca, Corcovado, and the Pão d'Assucar as a background, are so fascinating that one never tires of looking at them. On account of natural beauty, Rio can not be overpraised.

Although lacking some of the hustle of Buenos Aires, Rio is a very important market and distributing center for a great tract of interior country. A long line, the Central Railroad, takes one into the heart of the wealthy estate of Minas Geraes. Bello Horizonte, the recently built capital of this State, and Juiz de Fora are modern cities, with all such improvements as trolley systems, electric light, etc. The great gold mine of the St. John del Rey Mining Company, the Morro Velho lode, near Bello Horizonte, is well worth a visit; here in the heart of Brazil, away from any railroad, is an up-to-date plant

employing 3,000 men. The mine is noted as being of great depth; it is down 4,500 feet from the level of the entrance tunnel, and is soon expected to reach a full mile.

The ports on the northeast coast of Brazil should be visited on leaving Rio de Janeiro; Bahia, a historic place long occupied by the Dutch, Maceió, Pernambuco, and Parahyba are the most important. Cocoa, sugar, and cotton are the specialities of this region. The market is not so important as it is in the south.

From any of these ports connection can be made by the steamers of the Lloyd Brasileiro for the north coast and River Amazon districts. By visiting Para and Manaos something may be seen of another of Brazil's great sources of wealth—the rubber industry. Although most travelers will not care to penetrate sufficiently far to see the "seringeiros" at work, the cutting, sorting, and packing can be watched on the wharves of these two cities. The rubber is brought down from the interior by small steamboats, which load up for the return trip with almost every article of consumption needed by the people in the forests. Practically nothing is produced up there and the residents import almost all they use through Para and Manaos. Both these cities are surprisingly up to date and well kept and fully deserve of the closest attention on the part of manufacturers in this country.

On his return home the traveler will look upon Latin America with a new feeling of respect for her past progress and of hopeful expectation for the future in store for her. He will have made, perhaps not an intimate, at least a general acquaintance with the peoples inhabiting the countries to the south of us, and will have been charmed by their invariably affable and engaging manners, and will have ceased to look upon them as principally busy in hatching revolutions, being able to praise instead the good order which is everywhere manifested in their countries. He will have learned a little of South American history and to respect the memory of such men as Bolivar and San Martin and to marvel at the ignorance of the average North American concerning the great liberators of our sister Republics, especially after finding out the veneration in which Washington and Lincoln are held all over South America.

Although it is impossible in an article of this length to go into such detail as one is tempted, it is hoped it may give one a rough idea of what a business trip, occupying at least six months, would mean in the territory described. Such a trip would be profitable in itself to all who interest themselves in export trade, besides opening the eyes to the immense future possibilities latent in South America, and making one realize that the best guarantee of continued friendly relations and peaceful intercourse between nations is the development of commerce.



CORMORANTS ON THE GUANO ISLANDS OF PERU.

Photographed from group in the American Museum of Natural History, New York.

# ZOOLOGICAL EXPLORATION IN SOUTH AMERICA[a]

THERE is a saying current in Canada that "the twentieth century is Canada's," and when one considers the opportunities offered by her vast unsettled prairies for the raising of stock and growing of grain, the claim is no doubt well founded. But to the American zoologist there can be no question that the twentieth century is South America's. There, vast unmapped areas await the naturalist explorer, while the animal life of comparatively accessible regions is still but imperfectly known. It is true that both resident and visiting zoologists have already made contributions to our knowledge of the South American fauna of the utmost importance; but it is also true that we are as yet lacking in that exact, detailed information on which generalizations in modern science are based. It is not alone that we have many new species to discover, but that we would know much more concerning the distribution, habits, and economic status of those which have already been described.

To do this work thoroughly requires continuity of residence which permits of consecutive observations being made throughout the year. Thus we find that some of the most valuable publications relating to the South American fauna have been issued by the Governments, universities, and scientific societies of the Republics composing the southern half of the western hemisphere.

Nevertheless, the transient, or traveling naturalist can at least supply data which, later, may be elaborated into the more perfect whole. Consequently, everyone who has at heart the advancement of a general knowledge of the animal life of this marvelously rich continent will welcome the attention now being given to it by North American zoologists, who, realizing that their own country has now little to offer the pioneer naturalist, have turned their faces toward the teeming, virgin forests of the Tropics.

Thus we find that at Panama the United States National Museum is making an elaborate biological survey of the Canal Zone to establish an accurate, detailed record of existing conditions for comparison with those of some future date after the oceans are joined.

In the Lower Amazonian region Professor J. C. Branner, of Leland Stanford University, with six assistants, will conduct zoological

[a] By Frank M. Chapman, curator of ornithology in the American Museum of Natural History.

explorations with the use of a boat tendered by the Government of Brazil.

In Trinidad, Mr. Stewardson Brown, of the Philadelphia Academy of Sciences, is now at work, having sailed from New York on December 26, 1910.

In Venezuela, Mr. M. A. Carriker, jr., representing both the Carnegie Museum of Pittsburg and the American Museum of New York, after a season on the upper Orinoco, is now in the field near Barsiquimeto. Venezuela also claims the attention of Mr. Wilfred H. Osgood, of the Field Museum of Chicago, who sailed from New York for Maracaibo on December 31, 1910.

In the Cauca region of Colombia, Mr. W. B. Richardson, representing the American Museum, has been at work since November, 1910, and here the writer, with Mr. Louis Agassiz Fuertes, as artist, and Mr. Leo Miller, as preparateur, expects to join him in April of the present year.

In Ecuador, Mr. S. N. Rhoads, of Philadelphia, who, with Mr. Robert Lemmon as assistant, sailed from New York on January 21, 1911, proposes to work along the line of the railway from Guayaquil to Quito.

Of these six expeditions, I may be permitted to speak more at length of the one sent out by the Museum with which I am connected and of which I have the honor to be in charge.

It has in view two distinct but closely related objects. First, it is proposed to make thoroughly representative collections of the birds and mammals of the regions visited as contributions to both systematic and faunal natural history; second, so far as birds are concerned, it is proposed to present to the public a summary of the information gained through the medium of what we have termed "Habitat Groups." Such groups are composed of an actual foreground in which the vegetation of a certain locality is accurately reproduced as a setting or accessory to the birds of the same locality, and to this is joined, so skillfully that the point of contact is difficult to discover, a painted background or panorama, showing the country beyond that which is represented in reality. These painted backgrounds are from 18 to 26 feet in length and 10 feet in height. They are painted from nature by accomplished artists and constitute in themselves exhibits of much beauty and great educational value.

Over twenty of these Habitat Groups, illustrating North America and its bird life, have already been placed on exhibition in the American Museum, where they have been so universally admired and highly commended as a novel and successful method of presenting natural history facts, that through the generosity of friends of the Museum means have been provided to carry on this work in the more southern part of our hemisphere.



WILD TURKEY IN THE MOUNTAINS OF WEST VIRGINIA.

Photographed from group in the American Museum of Natural History, New York.



BIRD LIFE OF THE SAN JOAQUIN VALLEY, CALIFORNIA.

Photographed from group in the American Museum of Natural History, New York.

Field studies and collections have already been made from which to prepare a group of birds characteristic of the tropical portions of the State of Vera Cruz. The background here will show Orizaba with its crown of everlasting snow and thus constitute an effective lesson in the distribution of life as it is controlled by altitude.

The second group in this series is designed to depict a scene in Colombia from a point which it will be the duty of the expedition above mentioned to select.

Later it is planned to represent the bird life of the high Andes in Ecuador or Peru, the pampas of Argentina, the forests of the Amazon, and of other natural life areas in South America.

Such exhibits have a far-reaching influence as a means of presenting in popular, attractive, and adequate form the more important and significant results of the zoologists' researches.

While the field naturalist, therefore, may apparently be engaged solely in the pursuit of his own special branch of science, he is accumulating information which, properly presented, will broaden and unify the interests of the world at large, and at the same time he is forming with his co-workers in other lands those delightful associations which, rising above all differences of race and language, create a mutual understanding and good-fellowship between men of kindred tastes.



# NOTES ON LATIN AMERICAN ENGINEERING PROBLEMS AND THEIR BEARING ON TRADE

MR. ELMER L. CORTHELL, who has been connected for the last forty-five years with important engineering works in Latin America, has prepared for the BULLETIN a list of important engineering problems and points out their significance and bearing upon the trade of these countries. Mr. CORTHELL is perhaps the best informed man in the country on matters of this kind, and has personally conducted and assisted in the execution of various works in Mexico, Guatemala, Panama, Colombia, Brazil, Argentina, and Chile. His list embraces the following projects:

"*Tampico*, where the Barra works, of which I had charge, deepened the channel from 8 feet to 28 feet and immediately reduced the freight rates from Europe to the entire interior of Mexico 33 per cent.

"*Tehuantepec*, where Captain Eads and myself had hoped to carry ships across from the Gulf of Mexico to the Pacific Ocean and *vice versa*, but is now a railway trade route of great importance, with terminals capable of handling an immense transisthmian traffic, and it is doing it and will continue to carry what is naturally tributary to that route even on the completion of the Panama Canal.

"*The Transisthmian Route*, across *Guatemala*, which is of great importance and advantage to that prosperous country.

"*The Panama Canal*, which, through the courtesy of Colonel GOETHALS, the chairman of the Commission, I have recently examined. I can not speak too highly of the splendid management and the prospects of an early opening of this, one of the most important maritime canals of the world.

"When we consider that Valparaiso is on about the same meridian as New York, the advantage of this canal to the entire west coast of South America will be appreciated, and I may say the advantage to the entire eastern coast of the United States and Canada, as well as a linking of New York and New Orleans with San Francisco and Vancouver, and the entire East with the west coast of North America.

"*The construction* of the lines *by water and rail* from *Barranquilla* to *Bogota*, bringing the great central tablelands of Colombia to Puerto Colombia.

"The proposed opening of the barra at Boca de Cenizas at the mouth of the Magdelena River, which a syndicate in London is now arranging for, through competent English engineers—a project which I have had in charge with former concessionnaires for many years. This very feasible undertaking will give at least 10 meters depth over that bar, so that with adequate port facilities at Barranquilla large ocean vessels will be enabled to reach that river port. This will greatly reduce the cost of transportation to the interior of Colombia.

"There is no reason why *the mouth of the great Orinoco* should not be similarly treated, to open up to deep-draft vessels this great river basin of Venezuela, and *the Essequibo* ought to have a similar treatment and open up British Guiana to ocean vessels of deep draft.

"Coming to *Para* and *Manaos*, on the Amazon, the old saying that 'facilities increase business' is already verified at the new port of Para—for the quay recently constructed is already overcrowded with the navigation that seeks this port.

"Seventeen hundred miles above it is a work of construction of 260 miles of railway to link Para with La Paz, in the center of Bolivia, and the immense river systems above the Falls of the Madeira with the lower Amazon—the natural outlet for half a million square miles of Bolivia and Matto Grasso to the world.

"I consider this as the greatest field for enterprise and trade at present to be found anywhere in the world.

"*Pernambuco*, where extremely important port works on a large scale are now under construction, and where in a few years the largest ships may do their business at splendid quays now being built.

"*Bahia*.—The same may be said of this port, and in both cases great districts raising under a genial sun and in a rich soil the agricultural products that the temperate zone must look to the Tropics to furnish.

"*At Rio Janeiro* the Federal Government is building a splendid port in this superb harbor, which will enable all the important commerce of this capital city to be handled at a quay provided with the very best facilities for handling and caring for cargo.

"*Santos*, at the present finest port in Brazil, where into it is poured the coffee of the great State of Sao Paulo for shipment to the United States and Europe.

"*Paranagua*, to be improved to admit the largest ocean vessels and handle the products of the State of Parana.

"*San Francisco*.—A fine natural harbor and where the plans have been made for a first-class port to be the terminus of an east and west line reaching the Iguazu on the Alto Parana and thence to Asuncion, the capital of Paraguay, on the Paraguay River.



DR. ELMER L. CORTHELL,

Member United States Government Board Permanent International Commission of Navigation Congresses.

"*Rio Grande, barra and port,* now under construction to increase the depth on the bar from 11 feet to 33 feet, by the same methods as those followed at the mouth of the Mississippi and the Panuco at Tampico.

"This work and the port to be built with the same depth for the largest ocean vessels will open to the world the progressive State of Rio Grande do Sul and its railroad system of 2,500 kilometers, now shut in by this obstructive barra.

"*Montevideo,* where the brave little Republic of Uruguay is spending large sums to make a port equal to any.

"*Buenos Aires.*—What shall I say of this, the greatest port of South America in respect of magnitude of commerce—a port of wonderful growth, distancing in its rapidity that of any port of the world!

"When the plans for the existing port works were made, in 1885, 650,000 tons of entrances and clearances was all the city could boast of. The plans were made to accommodate comfortably 2,000,000 tons and the projectors were considered extravagant. It now uncomfortably has to accommodate nearly *12,000,000 tons.*

"*Bahia Blanca,* where the railroads and the Government have built important ports and established adequate commercial and naval facilities.

"On the Pacific coast, Chile is preparing for a suitable naval port and dock at Talcahuano and a safe commercial port at Valparaiso, and all the way up the coast in Chile, Peru, and Ecuador the railways that ambitiously climb the Andes to get down into Bolivian valleys and table-lands and the eastern slopes, that send their waters to the Amazon, are all helping out the trade of these extensive regions of fertile soil and rich in minerals.

"The new railway across the Andes between Chile and Argentina is already modifying and inspiring new trade routes, and ocean routes are changing in consequence.

"This and the Panama Canal will modify the ocean business of the world and prove grandly beneficent to humanity and especially of the 70,000,000 inhabitants of Latin America.

"Leaving now the coasts for a moment and the facilities for ocean traffic, a word should be said about the extraordinary development and coordination of the railway systems of the central parts of southern South America—changes which have come so rapidly that it is difficult to follow them.

"The time is fast approaching when this great central district is to experience a development greater than took place when the transcontinental lines of the United States and Canada invaded those great western regions of almost unknown territory.

"I refer to Bolivia and Matto Grasso—the great State of Brazil, a region of more than half a million square miles—rich in all that

makes a country great of possible agricultural and mineral products and a kindly, healthy climate.

"*The Brazil Railway* on the east is really the clearing house for the Mogypana, the Paulista, the Sorocabana, the Sao Paulo, and Rio Grande, the Rio Grande do Sul system, and the proposed line from San Francisco to the Iguazu.

"*The Brazilian Northwestern*, connecting with it and reaching to Corumba on the Paraguay River, and all of this finding its outlets to the seaboard at Santos, Paranagua, San Francisco, and Rio Grande do Sul.

"Reaching from Argentina, that Government will no doubt eventually reach Tupiza in Bolivia, and there connect with the southern line of the Bolivian Railway from La Paz.

"Extending over the mountains from the Pacific coast down into the valleys and table-lands of Bolivia are the Antofagasta Sucre, La Paz line, the Arica La Paz, and the Mollendo (in Peru) Juliaca La Paz line, and then as the Ganglion of all these is the Bolivian Railway, now linked with the Antofagasta line.

"From this central system a line is to be built from La Paz via Coripata to the head of navigation on the Beni, which will by its steamboat navigation connect with the Madeira and Mamore Railway and reach Para at the mouth of the Amazon, and so out to the world.

"From the center of Bolivia the Bolivian Eastern is projected, extending from La Cruz to Puerto Suarez, near Corumba, the western terminus of the Brazilian Northwestern. So, generally speaking, La Paz will eventually be linked on the northeast with Para, on the east with Rio de Janeiro and Santos, on the south with Buenos Aires, on the west with Valparaiso, Antofagasta, Arica, and Mollendo, uniting for their common benefit and for the highest civilization (for the railroad is the great civilizer), Peru, Chile, Argentina, and Brazil with La Paz, capital of Bolivia, as the central radiating point.

"Can anyone point to a situation anywhere in the world and in history more favorable for enterprise, industry, and commerce than the fortuitous conditions existing in the central regions of southern South America, or to a country more destined to a great development than the hitherto isolated Republic of Bolivia?

"However, it is not only in these countries that great developments are occurring, but also in that wonderful country in the south—Argentina. Witness the railway development that the National Government is now engaged in by radical construction, reaching through long lines of new roads remote districts on the Gran Chaco and in Patagonia.

"The Great Southern is also feeling its way across a low pass to Chile. A decided enlargement of the port of Buenos Aires is being prepared for—a ship canal from it to the Parana de las Palmas; irrigation and drainage, and river ports are proceeding on a large scale.

"The capital of Paraguay will soon be joined to Buenos Aires by the Paraguay Central—now being made standard guage and reaching the Alto Parana at Encarnacion—thence across the river by car ferry, thence by railroad now being completed to Santo Tome on the Uruguay River, thence by the Argentine Northeastern, Argentine Eastern, and Entre Rios Railroads, all now in one system, to Ibicuy, on the Parana, and thence by a car ferryboat, carrying 3 tracks and 23 loaded cars, 55 miles to Zarate on the Parana de las Palmas, and thence by rail to Buenos Aires. Probably within a year one can go from Asuncion to Buenos Aires without changing cars.

"I have thus hastily and roughly sketched some of the leading features of the work now going on in Latin-America, tending to its remarkable development and showing what the engineer and railway man is doing for the promotion of trade and to unite the countries of Latin America and bring them into closer commercial relations with each other and the rest of the world."



# RECEPTION OF THE MINISTER FROM PANAMA

ON February 4, 1911, Dr. Belisario Porras, who succeeds Sr. Constantino C. Arosemena as Minister of Panama, was officially received by President Taft.

In presenting his credentials as Envoy Extraordinary and Minister Plenipotentiary of his country to the United States, Doctor Porras spoke as follows:

Mr. President: I have the honor to place in your hands the letter which accredits me as Envoy Extraordinary and Minister Plenipotentiary near the Government over which Your Excellency so worthily presides, and, at the same time, the letter of recall of my predecessor, Sr. C. C. Arosemena.

The object of my mission is to maintain and, if possible, enhance the cordial relations of friendship which happily tie our two Governments. The colossal work of the canal enclaved in the heart of my country imparts an exceptional character to the bonds of friendship and interests existing between this great and powerful Republic and mine.

To the presence of Americans there we are indebted for the stable peace, progress that is already apparent, and true and legitimate liberties. But apart from this great boon we are blessed with the canal work itself—in which we are participants. This blessing places upon us very weighty responsibilities, by reason of our enviable geographical and commercial situation, of the fertility and easy accessibility of our territory; but this is the very cause which creates a manner of solidarity that tightens our bonds with this country and safeguards our destinies.

This plainly simplifies my mission very greatly, and I shall spare no effort to fulfill it in every way.

May it please you to receive the greeting I bring from the President of the Republic of Panama. He has directed me to express to you the sentiments of cordial friendship and lively interest he cherishes for the American Government and people. My personal sentiments are no less sincere and lively. Fervent are my wishes for your personal happiness and for the realization of all the ideals of the American people.

In reply, President Taft made the following remarks:

Mr. Minister: I am glad to welcome you to Washington and to receive from your hands the letter whereby you are accredited as Envoy Extraordinary and Minister Plenipotentiary of Panama near the Government of the United States. Your knowledge of our institutions and the acquaintance which you made with our people during your former visits to this country make you doubly acceptable in this quality.

As you rightfully remark, the relations between the United States and Panama are peculiar, based as they are in a large measure on the part each has taken and the interest each will have in the great interoceanic waterway so soon to be an accomplished fact. The Government and people of the United States can therefore take none but a lively and keen interest in all that affects the welfare of the Republic of Panama. Its future is necessarily associated with that of the United States, whose assistance in all rightful ways it may confidently expect in the maintenance of its stability and in the promotion of its development and prosperity. Therefore it is pleasing to note



Photograph by Clinedinst.

SEÑOR DOCTOR BELISARIO PORRAS,

Envoy Extraordinary and Minister Plenipotentiary of Panama to the United States.

the assurance which you give that the Republic of Panama does not fail to recognize its own obligations and responsibilities of cooperation in its relations with the United States

I have no doubt that it will be your aim and endeavor to maintain the good understanding which, since the independence of Panama, has existed between it and the United States and to make even more cordial, if that be possible, their friendly relations.

I thank you for your personal good wishes, and should be glad if you will be so good as to convey to the President of Panama the expression of my high appreciation of the friendly sentiments to which you give utterance on his part, and the assurance of the like feelings which I entertain for him and for the Government and people of Panama.

I shall take an early occasion of making to the President of Panama in writing due acknowledgment of the letter of recall of your predecessor.



# POSSIBILITY OF AN INTER-CONTINENTAL RAILROAD.

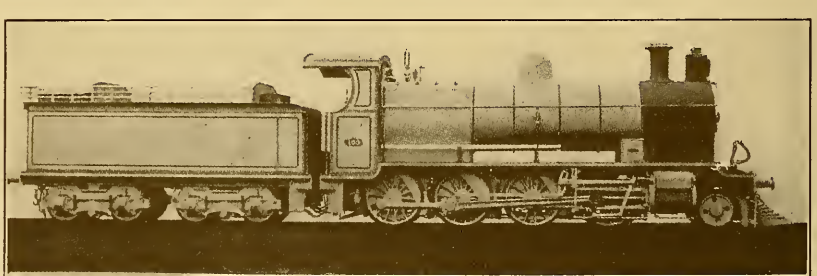
THE Pan American Railway, sometimes known as the Intercontinental Railway, will surely be constructed. This may not happen in the next 10 years, but within a score of years it should be possible to go all the way from New York City to Rio de Janeiro, Buenos Aires, and Santiago by rail. The completion of such a road would literally bind together the nations of America not only with bands of steel but with ties of greater friendship. There is no influence in the world that tends so much to develop comity among countries as facilities for traveling and visiting back and forth. The Pan American Railway will probably never be laid down and owned by any one company of a single nationality. There are almost insurmountable difficulties in achieving this. The difference in national laws of the many States through which it would pass, the varying rules for administration of companies and determining of passenger and freight rates, and finally, the enormous cost, would seriously interfere. On the other hand, there is no valid reason why the many different systems that are now running or being built in the countries reaching from Mexico south to Argentina and Chile should not be eventually linked. In fact, excellent progress is being made in this direction already.

Many practical railroad men advance the argument that there can not be a successful intercontinental railway because few if any passengers will wish to make a long, tiresome, and dusty journey by land when they can go so quickly and comfortably by fast steamers. They also contend that it would not do a successful through freight business, because no extended line of this character could give any such low freight rates as could the steamships. Both the assertions as to passengers and freight may be true, but it is not possible to contend that these through conditions would in any way interfere with the success of the railway. The local traffic, the exchange of travel between different countries, and the readiness with which tourists could make the entire journey, visiting each country in turn and stopping as they thought best, would provide abundant passenger business, while at the same time the exchange of commodities between two adjoining countries or between neighboring countries would supply the necessary freight. In this connection it also must be remembered that whereas steamships only touch the coasts of various countries, the intercontinental railway,

with its branches, would cover their interiors where are to be found considerable population, prosperous towns, and natural development of farms, mines, etc., which make traffic for railway systems.

A survey of the present situation proves that the Pan American Railway is much nearer achievement than most persons suppose. It is now possible to go practically all the way from New York to Guatemala City by rail. There are short lines in Salvador, Nicaragua, and Costa Rica which will eventually join terminals. Already a railroad extending through a large section of Panama, from David to Panama City, has been surveyed and the beginning of construction is not far away. In Colombia there has not been much new construction that would be part of the Pan American system, but new lines are being contemplated and financed. In Ecuador railroad connections already exist between Guayaquil, the port, and Quito, the capital. A good part of this line would be the trunk system of the intercontinental railway. In Peru, the road from Cusco south to Lake Titicaca, and the road in Bolivia from Lake Titicaca south to the capital, La Paz, and then running south into Chile, would form important links in the Pan American system. A new longitudinal line is already under construction in Chile, and a road which reaches from the heart of Bolivia south through Argentina to Buenos Aires is nearly completed. Transcontinental railways from Bolivia to Brazil, Paraguay, and Uruguay are also under partial construction n the form of new roads running into undeveloped sections of that part of the world.

Each International Conference of American Republics which has been held during the last 20 years has adopted resolutions strongly in favor of the Pan American Railway, and the sentiment of men both in the official and business life of all the Republics is strongly in favor of it. That its realization, therefore, is not far away must be an admitted fact. The only serious obstacles in the way are engineering difficulties through the Andes Mountains, but greater triumphs over nature than those required have already been achieved in the Andes themselves and in other parts of the world. With, therefore, capital and international cooperation, this linking together of the American Republics should become a reality and not remain a dream.



# BOOK NOTES

**The Buccaneers in the West Indies in the XVII Century.** By C. H. Haring. With maps and illustrations. Pp. 298. New York. E. P. Dutton & Co.

The aim and object of this volume, which as the author puts it—

is not only to give a narrative, according to the most authentic, available sources, of the more brilliant exploits of these sea rovers, but what is of greater interest and importance, to trace the policy pursued toward them by the English and French Governments,

is a praiseworthy one, and, while we are grateful for the new sources of information to which he introduces us, we can not but regret that the book is not more complete and more evenly balanced.



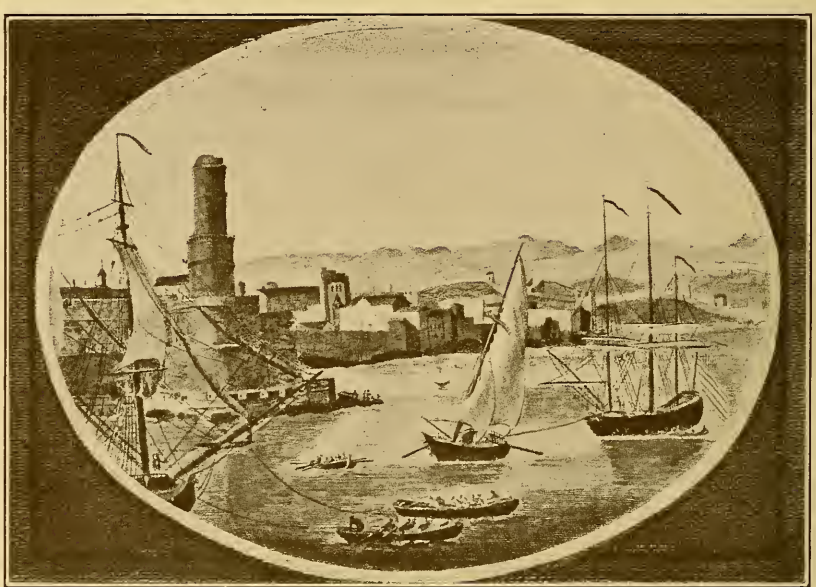
NOMBRE DE DIOS.

Illustrations from old wood engravings appearing in John Masefield's "On the Spanish Main."

Hitherto most of our knowledge regarding the buccaneers, also known as freebooters by the Dutch and flibustiers by the French, but characterized as *pirates, ladrones, and demonios* by the Spaniards, has been derived from such traditional sources as Exquemelin, himself a buccanneer, and from Dampier, Wafer, and certain contemporary missionary writers then resident in the West Indies. But the author of the present work, not satisfied with these sources, has had recourse to the manuscripts and state papers in various English and French archives, and Government officers, as well as to a number of recently published works which throw new light on the exploits of the corsairs of the seventeenth century, the secret relations between them and their respective Governments, and the motives which actuated them in their long warfare against the Spaniards in the West Indies and on terra firma.

The following account of the buccaneers, whose operations extended over the greater part of a century, and who after their suppression by the treaty of Ryswick in 1697 became pirates, who flew at every flag from Peru to Guinea and Malabar, gives a good idea of the character of the reckless and ruthless adventurers who were so long the scourge of the lands washed by the Caribbean—men to whom pillage was a lawful occupation and to whom Spanish plate fleets were the legitimate guerdons of dare-devilism and piratical strategy unlike anything of its kind recorded in the annals of our race:

They were desperate men, accustomed to living at sea with no trade but burning and plundering, and unlikely to take orders from any but stronger and faster frigates. Nor was this condition of affairs surprising when we consider that in the seventeenth century there flowed from Europe to the West Indies adventurers from every class of society; men doubtless often endowed with strong personalities, enterprising and intrepid; but often, too, of mediocre intelligence or little education, and usually without either money or scruples. They included many who had revolted from the narrow social laws of European countries and were disinclined to live peaceably within the bounds of any organized society. Many, too, had belonged to rebellious political factions at home, men of the better classes, who were banished or who



OLD PORT ROYAL.

emigrated in order to keep their heads upon their shoulders. In France the total exhaustion of public and private fortune at the end of the religious wars disposed many to seek to recoup themselves out of the immense colonial riches of the Spaniards; while the disorders of the Rebellion and the Commonwealth in England caused successive emigrations of Puritans and Loyalists to the newer England beyond the seas. At the close of the Thirty Years' War, too, a host of French and English adventurers, who had fattened upon Germany and her misfortunes, were left without a livelihood, and doubtless many resorted to emigration as the sole means of continuing their life of freedom and even of license. Coming to the West Indies these men, so various in origin and character, hoped soon to acquire there riches which they lost or coveted at home, and, their expectations deceived, they often broke, in a formal and absolute manner, the bonds which attached them to their fellow humanity. Jamaica, especially, suffered in this respect, for it had been colonized in the first instance by discontented refractory soldiers, and it was being recruited largely by transported criminals and vagabonds. In contrast with the policy of Spain, which placed the most careful restrictions upon the class of emigrants sent to her American possessions, England from the very beginning used her colonies, and especially the West Indian islands, as a dumping ground for her refuse population. Within a short time a regular trade sprang up for furnishing the colonies with servile labor from the prisons of the mother country Scots captured at the battle of Dunbar and Worcester, English, French, Irish, and Dutch pirates lying in the goals of Dorchester and Plymouth, if "not thought fit to be tried for their lives," were shipped to Barbados, Jamaica and the other Antilles. In August, 1656, the Council of State issued an order for all lewd and dangerous persons, rogues, vagrants, and other idlers, who

had no way of livelihood and refused to work, to be transported by contractors to the English plantations in America.

What was extraordinary about the peculiar warfare of the buccaneers—they loved to call themselves *The Brethren of the Coast*—was that it was carried on when England, France, and Holland were in Europe at peace with Spain. But the treaties of peace did not bind anyone beyond the line; that is, south of the Tropic of Cancer and west of the meridian of the Azores. Beyond these two lines, called *les linges de l'enclos d' amieties*, French and Spanish ships might attack each other and take fair prizes as in war. And what is here said of French ships was equally true of Dutch and English vessels. The English buccaneers, or Corsairs, or privateers, as one may choose to call them, had early gained the unenviable reputation of being the most adept pirates in the western seas. Indeed, as far back as the sixteenth century, SCALIGER, the noted Italian humorist, declared that *nulli melius piraticam exercent quam Angli*, and from that time on till the sacking of Panama by MORGAN, the English seadogs were the terror of the colonies in the every part of the world. Even the Dutch, who were for a while but little behind the English as freebooters, were ever ready to doff their hats to such men as DRAKE, SAWKINS, and MORGAN, and expressed their admiration of their piratical prowess in the words *Den Engelseman is een Duyvil voor een Mensch.*

The inveterate hostility with which the Englishman learned to regard the Spaniard in the latter half of the sixteenth and throughout the seventeenth century found its most remarkable expression in the



CARTAGENA.

exploits of the Elizabethan seadogs and of the buccaneers of a later period. The religious differences and political jealousies which grew out of the turmoil of the Reformation and the moral anarchy incident to the dissolution of ancient religious institutions were the motive causes for an outburst of piratica activity comparable only with the professional piracy of the Barbary States.

But these were not the only motive causes of piracy and buccaneering. The chief reason was undoubtedly, as CROMWELL expressed it, "the gaining an interest" in the West Indies, which were then entirely under the control of Spain. What he meant by "gaining an interest" was disclosed by subsequent events, which showed that it was nothing less than a share of the trade of the Spanish colonies, which was then entirely in the hands of the merchants of the mother country, and the possession of certain of the islands in the Caribbean as well as of territory on the mainland.

In attaining this object the Protector was backed by his countrymen, although there were not wanting those who "did not approve of this type of warfare against the Spaniards. This kind of marooning cruising in the West India trade, of plunder-

ing and burning towns," brought a brave, pious soldier with a long experience and honorable military record in the Massachusetts colony—

though it hath long been practiced in these parts, yet is not honorable for a princely navy, neither was it I think, the work designed, though perhaps it may be tolerated at present.

It has usually been supposed that the only losers by the lawlessness and depredations of the buccaneers were the Spaniards, but Mr. HARING shows that this was far from being the case. The losses and sufferings of the Spaniards were indeed terrible, but—

the advantages accruing to the invaders or to the colonies that received and supported them scarcely compensated for the effort it cost them.

Mr. HARING further observes:

The privateers really injured English trade as much as they injured Spanish navigation, and if the English in the second half of the seventeenth century had given the Spaniards as little cause for enmity in the West Indies as the Dutch had done, they, perhaps, rather than the Dutch, would have been the convoys,



AN ELIZABETHAN GALLEON.

and sharers in the rich flotas. The Spaniards, moreover, if not in the court at home, at least in the colonies, would have readily lent themselves to a trade illicit, though it be with the English islands; a trade moreover which it was the constant aim of English diplomacy to encourage and maintain, had they been able to assure themselves that their English neighbors were their friends. But when outrage succeeded upon outrage and the English governors seemed, in spite of their protestations of innocence, to make no progress toward stopping them, the Spaniards naturally concluded that the English Government was the best of liars and the worst of friends. From another point of view, too, the activities of the buccaneers was directly opposed to the commercial interest of Great Britain. Of all the nations of Europe the Spaniards were those profited least from their American possessions. It was the English, the French, and the Dutch who carried their merchandise to Cadiz and freighted the Spanish American fleets and who, at the return of these fleets from Porto Bello and Vera Cruz, appropriated the greater part of the gold, silver, and precious stuffs which composed their cargoes. And when the buccaneers cut off a Spanish galleon or wrecked the Spanish cities on the main, it was not so much the Spaniards who suffered as the foreign merchants interested in the trade between Spain and her colonies. If the policy of the English and French Governments toward the buccaneers gradually changed from one of connivance or encouragement to one of hostility and suppression, it was because they came to realize that it was easier and more profitable to absorb the trade and riches of Spanish America through the peaceful agencies of treaty and concession than by endeavoring to enforce a trade in the old-fashioned way inaugurated by Drake and his Elizabethan contemporaries.

The contemplation of the many new sources—manuscript and printed—used by the author in illuminating the English and French sides of his story makes one regret that he was unable to present the Spanish side with equal completeness. It can not be that the two Spanish works quoted by him—those, namely, of D. DIONISIO DE ALCEDO Y HERRERA and CESREO FERNANDEZ DURO—are the only ones available respecting a matter that was of such vital importance to the Spanish nation for so long and tragic a period as that embraced by the relentless warfare of corsairs and buccaneers. While the English were systematically baiting Spaniards and forcing trade upon them, willy-nilly; while the governors of Jamaica, Tortuga, Guadaloupe, and Martinique were granting letters of marque to privateers; and the officials of the Spanish Crown at Porto Bello, Santiago de Cuba, and elsewhere were issuing commissions of war against their enemies and making reprisals wherever possible, it can not be that the Spanish chroniclers, who were always so diligent in collecting the fullest information respecting everything that concerned the colonies or the mother country, were in this single instance, where the commerce and the prestige of the nation were at stake, either idle or remiss in duty. The archives in Spain and Latin America are, we are satisfied, as rich in material about the buccaneers as they are regarding far less important matters, and if Mr. HARING will only ferret it out, as he has ferreted out the long-ignored reports and papers in the English and French archives bearing on the interesting epoch with which his book deals, he will do much toward giving his work that completeness which it now lacks. And if, furthermore, he will dwell more at length on the exploits of L'OLONNOIS and MANSFIELD, probably the ablest of the buccaneers, one who dreamed of establishing a buccaneer commonwealth, and who would very likely have succeeded had his career not been cut short when success was almost within his grasp, he will give us what will for a long time to come be the standard work on the subject of which it treats.

But while he is giving his attention to those more important changes, so essential to his *opus majus*, let him not neglect certain minor things which seem to have been strangely overlooked. The proof reading has in places been very carelessly done. To find two words like "POPAGAN" and "MARIGUITA" for POPAYAN and MARIQUITA misspelled in a single line betrays more than ordinary carelessness. But a more serious fault than misspelled words is certain misstatements of fact. He refers, for instance, not once but several times, to the Jesuit historians "LABAT" and "DUTERTRE." How he could have fallen into such an error, if he has actually consulted the works of these writers, is difficult to understand. Neither was a Jesuit. Both of them were Dominicans. Again he tells us, on page 73, that—

> In March, 1694, the Jesuit (sic) writer, LABAT, took part (sic) in a mass at Martinique which was performed (sic) for some French buccaneers in pursuance of a vow (?) made when they were taking two English vessels near Barbadoes.

A Catholic priest does not perform a mass, but says or celebrates it. But in this particular instance, when we are informed that LABAT took part in the mass, we are at a loss to know whether he simply assisted at it or whether he was the celebrant.

We trust the changes we have indicated can be made in a new edition. If they should be, we shall welcome Mr. HARING'S work as the best on the subject in the English language. He will then be equipped for a work on the "Buccaneers of the South Seas," which we trust he will find time and inclination to write, a subject that has never yet been adequately treated, but which is scarcely inferior in interest, romance, and deeds of daring and valor to that of "The Buccaneers of the West Indies of the Seventeenth Century."

**"Our Foreign Service. The 'A B C' of American Diplomacy."** By FREDERICK VAN DYNE. Rochester, N. Y., The Lawyers Cooperative Publishing Company. 1909. ix, 316 p. Plates. Size 5¼ by 8½ inches. *Price, $2.50.*

The author, whose previous works on "*Citizenship of the United States*," and "*Naturalization*," entitled him to a high position among American authorities on statecraft, has compiled an extremely useful volume. He takes up the study of the Diplomatic Service and the Consular Service from their inception, and includes copies of the routine letters and forms in constant use in these two branches of the Government service.

Under the heading of "Duties," Mr. Van Dyne includes this significant paragraph:

> In this commercial age, with the strong competition for supremacy in the export trade, and the various efforts being made by foreign governments to secure advantages over the American manufacturer and exporter, our diplomatic officers are required to keep a keen eye on all measures relating to commerce which may affect our interests, and to give our Government prompt information thereof.

The Consular Service is extensively described, and the duties of consuls under all possible contingencies are explained in clear and simple English.

The book contains a valuable Appendix, which gives the regulations governing appointments and promotions in the Consular Service, regulations governing examinations, sample examination papers, forms, etc., and is furnished with a complete index.

The work, while only contemplating giving the first essentials in instruction in diplomacy, is nevertheless worthy of the attention of all diplomatic and consular officers in the American service.

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**The United States of Brazil,** with a chapter on "The Republic of Uruguay." By CHARLES W. DOMVILLE-FIFE. Illustrated. London, FRANCIS GRIFFITHS, 34 Maiden Lane, 1910. *Price 12s. d.*

The author published only recently "*The Great States of South America*" (reviewed on p. 114, of the BULLETIN for January, 1911), and has now given special study to the largest of these "States" in a volume of 247 pages, the concluding 10 pages being given to the neighboring Republic of Uruguay. The numerous illustrations are selected with care and judgment, and convey a practical idea of the development of the cities as well as of the wildness and naturalness of the vast interior. There are two parts—Old Brazil and Modern Brazil—the former presenting a historical background by which the latter may be the better understood. There is nothing new in the book, and diligent proof reading can discover errors that ought to be eliminated from a publication of this character, but for the purpose of presenting a worthy picture of the country and its people, it can be commended as interesting and trustworthy.

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**Zwei jahre unter den Indianern** (two years among the Indians). By Dr. THEODOR KOCH-GRÜNBERG. Two volumes, about 775 pages altogether. Published by ERNST WASMUTH, A. G. Berlin, 1909. 440 illustrations, 22 engravings, and 5 maps, prepared by the author.

Doctor GRÜNBERG has done wonderful service in presenting this account of his studies among the Indians of the regions of the Amazon, beyond the junction with that stream of the little known Rio Negro. Not only is he a qualified student of ethnology and kindred sciences, but he carried with him that delightful sympathy toward the natives which is undoubtedly the strongest factor in acquiring their confidence, so that what is revealed may be taken for the truth, in both the racial and social interpretations

of the words. As an addition to the knowledge of these seldom visited and slowly disappearing tribes of the Brazilian Tropics, these volumes are invaluable, and must be a permanent contribution to the literature of the subject. Doctor GRÜNBERG gives, in many of the chapters, his serious conclusions concerning the aborigines and their position in the human scale, but he lightens all of his pages with so much human interest in his native friends, comrades, and fellow travelers, that the reader appreciates how close we all are in the one great family of man. The author has been again appointed to make a second expedition in Brazil.

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"**The Pocket Guide to the West Indies.**" Colonial edition. By ALGERNON E. ASPINALL. London, Duckworth & Co., 1910. xv, 315 p. xxiv. Maps. Plates. Size, 4¼ by 7 inches. *Price 5 shillings.*

This is a good guide to the British West Indies, but not comprehensive in the information contained on Cuba, Haiti, or Santo Domingo. The Havana hotel list herein given, is, to say the least, meager. A few pages are devoted to the Panama Canal, but we fear the author has, in deference to national prejudice, slighted the Latin West Indies to the benefit of the British.

The make-up of the book is good. It is of a convenient size, printed in clear type, with just enough illustrations and guide maps.

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"**Montezuma and the Conquest of Mexico.**" By ELIZABETH EGGLESTON SEELYE, assisted by EDWARD EGGLESTON. New York, Dodd, Mead & Co., 1880. 385 p. Plate. Size, 4¾ by 7½ inches. *Price $1.25.*

This is a timely reprint of an earlier edition which gave the story of the "Conquest of Mexico" as learned from the letters of CORTES himself and BERNAL DIAZ, who was nowise an enthusiastic admirer of his chiefs—a one-sided source of information unfortunately, but after all, the best available.

It is to be regretted that there are no records from an Aztec source that would give the other side of the most remarkable exploit.

The book is neatly bound, well printed, and easily read.

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"**Documentos Históricos Mexicanos,**" obra commemorativa del Primer Centenario de la Independencia de Mexico. La publica el Museo Nacional de Arqueología, Historia y Etnología. Bajo la dirección de GENARO GARCÍA. Por acuerdo de la Secretaria de Instrucción Pública y Bellas Artes. Six volumes in quarto of 500 pages. Profusely illustrated, with magnificant cromolithographs, vignets, engravings, and cuts. Press of the National Museum of Arquiology, History, and Ethnology. Mexico, 1910.

This is a collection and classification of all the documents and data relative to the struggle for Mexican independence. It is published in memory of the men who revolted against Spanish authority and contains much material hitherto unavailable. To the student of Mexican history it holds much of interest, and Señor GENARO GARCÍA has earned the gratitude of his countrymen for the masterly manner of compilation.

The volumes are excellent examples of the printers' art and show clearly the progress made in this line by Mexico. Señor GARCÍA and his collaborators are to be sincerely congratulated on the result of their labors.

"**La Cuna del Descubridor de America, Cristobal, Colon.**" Por JUAN SOLARI. Imprenta de ISIDORE DE BENEDETTI, Buenos Aires, 1910. A pamphlet of 84 pages, octavo.

We have ever failed to take seriously the conflicts that rage in rival communities for the honor that comes with the location of a great man's birthplace.

The volume before us pretends to set at rest for all time the spurious claims of Genoa as the natal city of COLUMBUS, substituting Terrarossa (auspicious name) in the Valley of Fontanabuona, of the Province of Genoa, as the cradle place of the discoverer.



The matter is decided to the entire satisfaction of the author, who concludes his work with a chapter that identifies the father of CHRISTOPHER COLUMBUS and distinguishes him from others of the same name.

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"**Cane Sugar: A Text-book on the Agriculture of the Sugar Cane, the Manufacture of Cane Sugar, and the Analysis of Sugar-House Products; Together with a Chapter on the Fermentation of Molasses.**" By NOEL DEERR. Alfrincham (Manchester), England. NORMAN RODGER, 1911. xv, 592 p. Illus. Plates. Size, 6 by 9¾ inches. *Price 1 pound.*

There is no dearth of literature dealing with the subject of sugar cane and its cultivation, but the book before us is of exceptional merit.

One is at once struck with the perfection of the plates, which are distinctly artistic, and we judge accurate; the binding is cleverly appropriate and the typography will be appreciated by those who read much. In fact, the whole physical side of the book leaves nothing to be desired.

The text is the work of a man whose previous book on "*Sugar and the Sugar Cane*" is a standard wherever the saccharum grass is grown. The author, having been alchemist, factory manager, and sugar technologist in a large experiment station, therefore is a thoroughly trained technical and practical expert, and the information contained in this volume is sure to be of service to the intelligent practical planter.

The work is a skillful condensation and classification of the latest theory and practice in cane culture.

# LATIN AMERICA IN THE MAGAZINES

"**Progressive Argentina,**" by JAMES DAVENPORT WHELPLEY, in "*The Century Magazine*" for March, is one of the best short articles dealing with that remarkable country that it has been our pleasure to read for a considerable time, although an enormous amount of published matter has appeared on this Republic during the last year.

This paper by the well-known commercial expert epitomizes the data on conditions in Argentina and gives one a wide view of the situation and a keen focus on the future.

Mr. WHELPLEY quotes some interesting figures on Argentine trade in 1909:

Argentina is the greatest exporter of corn in the world; she sends abroad more chilled and frozen meat than any other country. Only Russia excels her in wheat exports, and only Australia contributes more wool to international trade. The story of her occupations is told in the fact that nearly $4,500,000,000 of working capital is represented in the pastoral and agricultural pursuits and in the allied industries, while less than $100,000,000 is involved in manufactures, and this includes electric-light and power plants used in the larger cities.

Among these pastoral and agricultural lines the future of Argentina lies. Her manufacturing industries will grow in variety and in value, but they will ever remain a comparatively inconsiderable part of her national wealth. Nature herself has set her limitations with no uncertain hand. A serious lack of fuel and water are characteristic of her vast areas. The great meat-and-bread-producing regions are in the eastern half and in their physical characteristics resemble western Kansas. To the west, and extending to the foothills of the Cordilleras, is the desert, which may be likened to Arizona. Along the foothills of the Andes conditions prevail similar to those which hold on the eastern slope of the Rocky Mountains. To the north the subtropics are invaded, with a more plentiful rainfall and considerable forests of hard woods. To the south lies Patagonia, with its long reach down toward the Antarctic.

In comparing the country geographically with the United States, he perhaps brings a better mental picture to the average American than he could in any other way. This analogy might in a degree be extended to the population of the two countries. For instance:

Out of a total population of a little over 6,000,000, nearly one-third are foreign-born and probably more than half of the other two-thirds sprang from foreign-born parents. Of the foreign-born, over 1,000,000 are Italian, or fully one-sixth of the present population. Nearly 700,000 were born in Spain, over 100,000 in France, 40,000 in Austria, 30,000 in England, and 25,000 in Germany. The rest of the foreign-born came in small numbers from many far places, or from other South American countries, Brazil furnishing the greatest number. As far as is known, there are fewer than 3,000 North Americans now resident in the Argentine.

The author then tells us that the result of this mingling of races is a type of man of quick intelligence, natural-born talker, proud, sensitive, and ambitious.

Of course it is well known that England is very heavily interested financially in Argentina, having some $750,000,000 invested in railroads alone, and for this reason it is easily understood that Great Britain holds a commanding position in the markets of the country.

Of further interest in the matter of trade, the author says:

Racial affinity takes the Argentino to Europe for business or pleasure rather than to the United States There is no immigration from North America, and the freight situation affords no return cargoes to the United States. In 1909 oversea vessels to the number of 4,095 entered Argentine ports, and 4,199 sailed away. Of the 4,095 arrivals, 522 came from the United States, one-half of these being small sailing vessels, most of them loaded with lumber from Gulf ports. Of the 4,199 departures, only 83 steamships and 8 sailing vessels cleared for North American ports. Briefly, this means that the cargo business between the United States and Argentine is nearly all one way. It is for this reason that it is found difficult to make any headway with American trade in coal, the same being a very large item in the Argentine trade with England. Ships must have cargo both ways or charge the entire voyage to a single cargo. This is a most serious drawback to the increase of American business in the Argentine, and it is difficult to see at this time just how the situation can be changed.

As a hopeful sign for the future, we quote the following:

It must not be assumed, however, that there is any lack of ocean transportation for freight or passengers between New York and the Argentine. Ocean freight is the cheapest commodity in the world, considering the service rendered, and there is always keen competition for cargo. From $3 to $4 per ton is the rate from New York to Buenos Aires, and charters have recently been contracted for as low as $1.75 per ton for this journey of over 6,000 miles, a figure considerably less than the usual rate from Europe to Buenos Aires. The direct passenger and mail service is slower and less frequent than it might be, and probably should be, to stimulate exchanges between the United States and Argentina; but there is at present little apparent inducement for expediting the same, except for patriotic reasons or in the hope that the future will justify the effort and the expenditure.

Mr. WHELPLEY continues with a careful exposition of the means taken by English and German merchants to establish themselves firmly in the Argentine market, and then takes up a discussion of the United States trade.

The status of the trade of the United States in the Argentine is peculiar. A few big American corporations have gone at it carefully, intelligently, and with continued energy. American steel and iron makers have found a profitable field in which they have won a fair share of business in sharp competition with England, Germany, and Belgium. Lately Russia has appeared upon the scene as a seller of steel rails, and her prices have upset all former market conditions. It remains to be seen, however, whether Russia can maintain her position for any length of time as to supply and prices.

American harvesting machinery takes care of the crops of the Argentine, as it does those of many other countries. The American oil companies supply the Argentine market with illuminating and lubricating oils. The American packing interests have gone heavily into the shipping of frozen and chilled meat, and now control probably 50 per cent of the Argentine export trade in those products. As yet the shipments are all to Europe, but the time may come when the people of the United States will look to the Argentine to supplement the home supply of bread and meat. American methods have quite recently given the Argentine cattle raisers a moment of bewilderment from which they have not yet fully recovered. During the live-stock show of last year the packing interests found a few head of Hereford steers to their liking, and ran the auction price up to over $5,000 for each steer, a world's record in the price of beef. It was an advertisement, costly in first outlay, but it has set all the cattle raisers of the Argentine in motion in the direction of better-bred stock, and has given them an idea of just what is wanted by the packing houses. It was an object lesson which will probably bring satisfactory results to both teacher and pupil, and it was an American idea.

Outside of these greater branches of American trade which have made an outlet in the Argentine, there are many others which have obtained a good footing, and more are yet to come. One hears the same discouraging stories here as elsewhere concerning American exporters—bad packing, neglect of the wishes of foreign customers, indifference to local conditions, and, worse than anything else, bad faith in the filling of orders, not only as to quality and quantity, but as to promises. In the degree to which the manufacturers of the United States outgrow the idea that foreign trade consists merely of dumping a surplus upon an outside market to get rid of overproduction, so will the foreign trade of the United States increase permanently with each passing year.

The article is a most thorough one, and is unhesitatingly recommended to all who are interested in the future of "the silver country."

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"**Argentine Patagonia—A Land of the Future.**" By MARRION WILCOX. Appearing in the December number of the "*Bulletin of the American Geographical Society*" is a paper which gives some interesting details of the colonization of this section of Argentina by a party of Welshmen, and although the colony suffered many deprivations, principally because of lack of communication with the outside world, it now seems probable that this great territory of Argentina will take on the same character of development that has been brought about in our Northwestern States. An elaborate system of irrigation has been inaugurated, and it only needs the arrival of colonists and the completion of transportation lines to add another enormous section to the world's wheat-producing area.

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The traditional word Patagonia has practically disappeared from the maps of modern geographies. Argentina has given the official names of Santa Cruz and Tierro del Fuego to the territories covering what was once the region of the Patagonians east of the mountain ridge, and Chile uses the name Magallanes for the territory west of the

divide. Patagonia is an ancient title, however, as it was inscribed on a map as early as 1529, and has ever since been recognized as indicating a geographical, if not a political, division of the earth's surface. Therefore students are loath to abandon the word, and is retained in one of the newest critical essays of that part of South America. *Stüdien über West-Patagonien* (Studies on West Patagonia) is the heading of an article by Hans Steffen, with a map, which appeared in the "*Geographische Zeitschrift, Leipzig*" in the numbers for September 24 and October 19, 1909. As a matter of fact, this is more than a simple article, for it presents a résumé of the entire knowledge of this wonderful region of Chile. West Patagonia means about what is the Province of Magallanes to-day, and the geological, climatic, and landscape conditions are examined with great care. The author acknowledges that his material is only a groundwork for further study, but certainly to have such well-collected material is a good beginning in any case.

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Under the title "**En Argentine,**" the "*Figaro,*" of Paris, is running a very interesting series of articles written by its special correspondent, Mr. JULES HURET, describing his trip to the Argentine Republic, where he was sent especially for this purpose by the "*Figaro.*" In the first of the articles which have been published, the writer gives a graphic description of the trip from the moment of his departure, the life on ship board, the stop at Rio, the arrival in Buenos Aires, and his impression of the city and the life and customs of its inhabitants. Mr. HURET's articles are written n the easy delightful style of the *raconteur*, and the privileged reader of the "*Figaro*" looks forward to their appearance with the greatest possible interest.

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The Special Exhibition Supplement of the "*Review of the River Plate,*" gives all the details of the awards and exhibits of the recent Buenos Aires exhibition. In this connection it is interesting to note that British exporters of steel products trace orders to the value of $3,000,000 directly to the influence of their participation in this celebration.

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"**The British Pavilions in the Railway and Land Transport Section,**" a supplement to "*The Standard,*" is a series of descriptive articles dealing with the exhibitions of British corporations at the recent centenary celebration in Buenos Aires, Argentina. This supplement contains material that would be undoubtedly instructive to any American manufacturers who contemplate entering the Latin American field.

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"**Over the Andes in a Hand Car,**" a thrilling description of a ride through the Trans-Andean tunnel, by MARION WILCOX, appears in "*Travel*" for February, 1911.

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"**Trade of the United States in South America,**" by PERCY F. MARTIN, and "**An American's Chances of Success in Argentina,**" are two timely articles in the February number of "*Exporters' Review.*"

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"**Le Président Gómez et la politique Vénézuélienne,**" by J. HUMBERT, and "**Les Universitiés Argentines,**" by E. HERRERO-DUCLOUX, are two analytical articles in the "*Bulletin de la Bibliothèque Américaine,*" for October 15, 1910.

In the first the author enlarges on the fact that with the inauguration of President GOMEZ Venezuela has entered on a new era of development in her history, one that presages a prosperous and stable future. Without doubt President GOMEZ in the

two years that he has held office has accomplished much in the way of a thorough organization of the Government of his country.

The article dealing with the Universities of Argentina will come as a surprise to a great many who are entirely unacquainted with the development of education in the Latin countries. Mr. HERRERO-DUCLOUX makes a comparison of the system of education in vogue in Paris with that of Argentina, which is very flattering to the latter country.

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"**Potosí,**" by Prof. HIRAM BINGHAM, of Yale University. In the January number of the "*Bulletin of the American Geographical Society,*" Professor BINGHAM depicts this ancient capital of the western Spanish world, and tells us of the departed glories of this magnified mining camp. The city is 13,500 feet above the level of the sea and lies in the shadow of Cerro—the cone of silver—that gave the city its ancient fame.

The discovery of silver at Potosí was made by a llama driver about the middle of the sixteenth century It was soon found that the mountain was traversed by veins of extremely rich ore. After the gold of the Incas had been gathered up and disposed of, Potosi became the most important part of all the Spanish possessions in America. At the beginning of the seventeenth century, when New York and Boston were still undreamed of, Potosi was already a large and very wealthy city. It attracted the presence of hundreds of Spanish adventurers, including many grandees. In short, it had taken on all the signs of luxury that are common to big mining camps. Grandees in sumptuous apparel rode gaily caparisoned horses up and down the stony streets, bowing graciously to charming ladies dressed in the most costly attire that easily gotten wealth could procure. On feast days, and particularly on national holidays like the King's birth day, elaborate and expensive entertainments were given.

If it were not for the wide expanse of ruins and the very large number of churches, it would be difficult to realize that this was ever the largest city in America. The routes which led to the Bolivian plateau became the greatest thoroughfares in America. Money flowed more freely than water. In fact, the Spaniards found considerable difficulty during the dry season in supplying the city with sufficient quantities of the later commodity to use in washing the ore and in meeting the ordinary needs of a large population. Consequently they went up into the hills above the city and built, at great expense, a score of dams to hold back the water that fell during the rainy season and preserve it for the dry.

Immediately following the wars of independence, and the consequent opening of the country to foreign capital, a wild mining fever set in among London capitalists. Greedy and ignorant directors took advantage of the cupidity of the British public to enrich themselves, while incidentally working the mines of Potosí with disproportionately expensive establishments. So eager was the public to take stock in Potosí that shares which at the outset were quoted at 75 or 80 rose incredibly in the short space of six weeks. Some of them went up above 5,000. As was to be expected, this speculative fever was followed by a panic, which ruined not only the stockholders, but those unfortunates, like EDMUND TEMPLE, who had gone to Potosí in the employ of one of the wildcat companies, and those South Americans that had honored their drafts in London. Then followed a long period of stagnation. But as railroads came nearer and cart roads began to multiply, transportation became cheaper and new enterprises sprang up.

The stratas of silver run small nowadays, and the mining of the baser metal, tin, is the prize of the workers.

As a tangible evidence of the old-time industry, the mint still is there.

The principal object of interest in the city, however, is the Casa Nacional de Moneda, the great mint, which was begun in colonial days to receive the plunder that the Spaniards took out of the hill by means of forced labor of their Indian slaves. It extends over two city blocks, and is really a collection of buildings covered by a massive roof and surrounded by a high wall with only one entrance. The front is striking At regular intervals along the roof are little stone ornaments like funeral urns. The few windows are carefully guarded with iron bars. On either side of the elaborately-decorated façade of the two-storied portal are wooden balconies, over which projects the heavily-timbered roof covered with large red tiles.

As one enters the great building from the street and passes between massive doors into a large courtyard, the first thing that attracts one's attention is an enormous face, 4 feet in diameter, which looks down at the intruder from over the archway that leads to the second courtyard. The gigantic face has a malicious grin, yet bears a distinct resemblance to BACCHUS. Who put it here and what it signifies, does not seem to be known. Suffice it to say that many of the Quichuas before starting on a journey come to the courtyard to make obeisance to the face, throwing down in front of it a quid of coca leaves just as they used to do to the rising sun in the time of Incas.

The courtyard is surrounded by an arcade with heavy arches, over which runs the carved balustrade of the second-story balcony. In the second patio, which is also paved with cut stones, a tiny narrow-gauge railway is used to carry silver ingots from the treasure room to the stamping machines. In one of the buildings is a physics laboratory. In another, a little gymnasium. In still a third, a collection of minerals. All of which are evidences that here are the beginnings of a school of mines that is being developed under the

able direction of an intelligent young Bolivian engineer who received his training at Notre Dame University in the United States. In another old building are still standing the great wooden machines that were formerly used in the process of hammering out the silver. In a large room on the second floor of still another are kept the vellum-bound records of the mint and all the dies which have been used for the past 200 years. According to the records, the silver taken from here in the colonial days amounted to about two billion ounces. Most of the stamping was done by hand. The Bolivian Government has cleared out two or three of the structures and installed modern machinery imported from the United States.

One of the most remarkable features of the mint is the size and condition of the huge timbers that support the roof. They are as sound to-day as they were 200 years ago, when, with infinite labor, they were brought across the mountains from the distant forests of the Chaco.

The roof is surmounted by a number of small sentry boxes, which are connected by little paths and stairways that lead to all parts of the structure. In the old days it was necessary not only to protect the "money-house" against possible attacks from without, but to make sure that the Indians, who were assigned to work in the mint, did not escape from the attics where they slept at night.

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"**Two American arbitrations before the Permanent Court of the Hague**" (Deux Arbitrages américains devant la Cour Permanente de la Haye) is one of the leading articles appearing in the last number of the "*Revue des Sciences Politiques*," of Paris, in which the writer, Mr. GEORGES SCELLE reviews at considerable length the North Atlantic fisheries case, recently passed upon by the Hague tribunal. In the next issue of the "*Revue*" the case of the Orinoco Navigation Company against Venezuela will be taken up.

In his introduction Mr. SCELLE says that among the nations that have done most for the great cause of arbitration the United States deserves to be placed in the first rank, and that since the famous Jay treaty, dating from 1794, it has been connected with more arbitrations than any other country, except possibly England. It is bound to almost all the nations of Europe and America by a close system of permanent arbitration treaties, and its efforts in the two Peace Conferences, in favor of obligatory arbitration, its support of the French delegation at the time of the second meeting of the Hague, have made it morally our ally in the good fight for peace and justice. Of the seven arbitration cases decided by the permanent Court of the Hague since the beginning of its existence up to June 1, 1910, the United States was interested in four, and it is again found as a plaintiff in the two cases passed upon by the permanent court in the months of September and October, 1910—the North Atlantic Fisheries case, in which England was an adversary, and that of the Orinoco Navigation Company, in which Venezuela was the defendant. The doctrinal interest in these two cases is great, and the first one offers, besides, a certain political interest, as it ends a quarrel more than secular and which had often threatened to become acute.

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"**The Fourth International American Conference. General Record of Proceedings. July 12 to August 20, 1910,**" is published in the "*Supplement to the American Journal of International Law*" for January, 1911.

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"**Address of Dr. H. Lammasch on Opening the Arbitration Between the United States and Venezuela in the Matter of the Orinoco Steamship Company's Claim, September 28, 1910,**" in "*The American Journal of International Law*," for January, is a short paper in which the author states briefly the differences of principles involved in this famous case.

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"**The Pan American Commercial Conference**" is the title of an article appearing in "*American Exporter*" for March, which takes up a brief description of the work carried on during the recent Commercial Conference held in the building of the Pan

American Union. This office has in preparation the proceedings of this conference, which are being carefully compiled, and will be published in full for distribution at an early date.

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"**Japan and the Panama Canal**," a short article in "*The Oriental Economic Review*," for January 25, quotes the following from "*The Japan Chronicle*," attributed to Mr. SHIGETAKA SHIGA, the eminent Japanese geographer:

There can be no doubt that the opening of the Panama Canal will bring about, to a great extent, fresh facilities for communication between Japan and the States of South America. But any sudden progress can hardly be expected either in our commercial or political intercourse with these States in South America because the United States, adhering to the Monroe doctrine, is sure to intervene in any international affairs that may occur in any part of the American continent. It must be expected that so long as the relations between the United States and Japan are not perfectly restored to the former bond of friendship we can not hope for any marked development in our intercourse with any States in South America. In the present condition of international politics the States in South America can not enter suddenly into any close intercourse with Japan against the will of the United States. The first thing we have to do is, therefore, to endeavor to restore our bond of friendship with the United States to its former state; otherwise, as I have said, we shall never be able to promote our intercourse with any States in South America.

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"**Fortify the Panama Canal**", by Rear Admiral A. T. MAHAN, United States Navy, in "*The North American Review*," for March, 1911, is a masterly essay on this subject, which is at present a source of so much controversy.

Rear Admiral MAHAN's standing as a naval officer and as a writer entitle his words to a most serious consideration.

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"**Have we the Right to Fortify the Panama Canal?**" by ALBERT BUSHNELL HART, appears in "*The World To-day*" for March, 1911. The author argues very strongly on the negative side of the question.

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"**Should the Panama Canal be Fortified?**" an article by LOUIS LIVINGSTON SEAMAN, is contained in the March number of "*The Editorial Review*."

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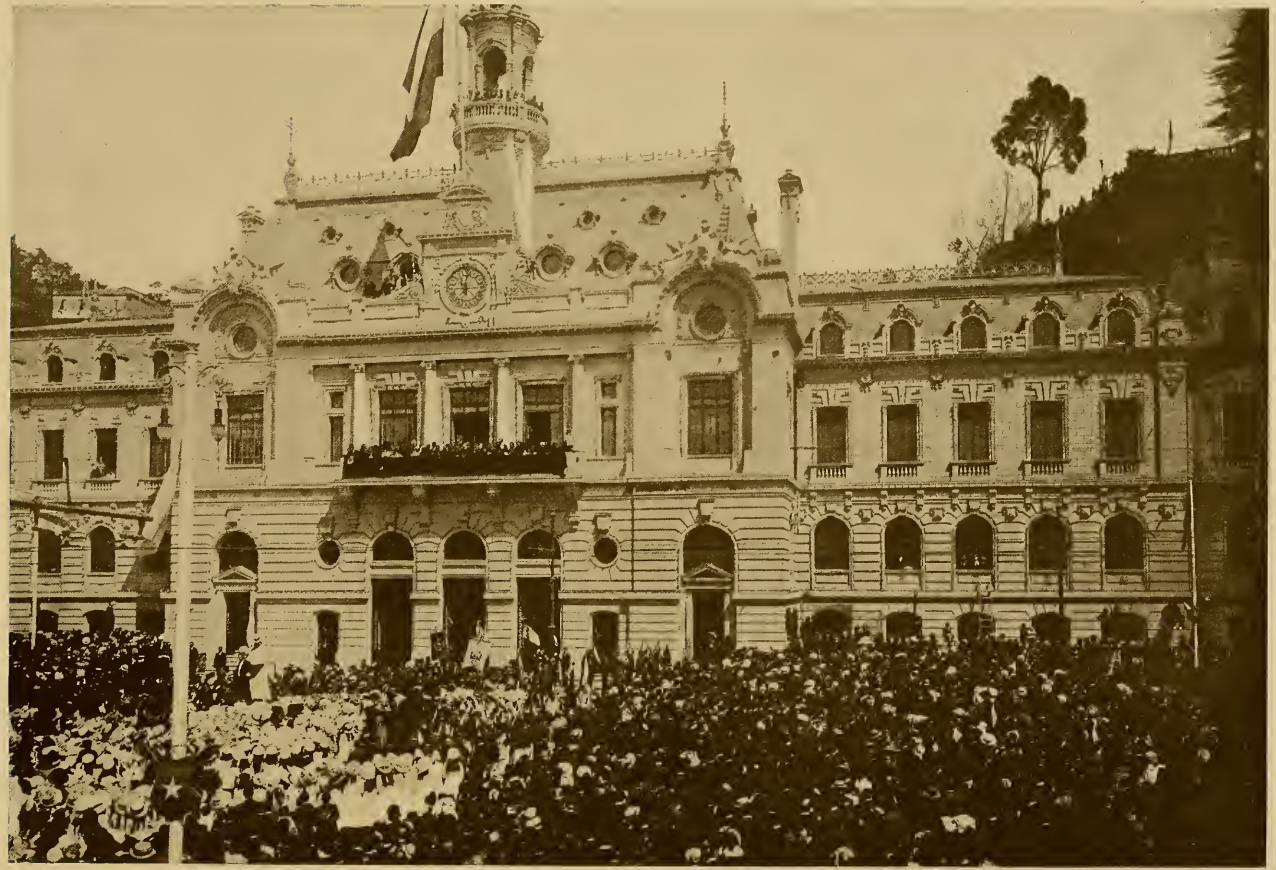
"**A Chemical Laboratory of Nature**," by NEVIN O. WINTER in "*The World To-day*," for February, is an article descriptive of the nitrate country of Chile.

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"**Gisements diamantifères en Colombie**," in the "*Bulletin de la Société Française des Ingénieurs Coloniaux*," by J. M. FIEUX, is a review of an article appearing in the "*Engineering Annals of Bogota*," which puts forward the question as to the existence of geological formations containing diamonds in Colombia. The author concludes that there are such formations in the Province of Antioquia, basing his conclusions on the resemblance of the igneous fields of the Province to those of South Africa.

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"**Coffee Culture in Colombia**," by CARLOS E. LOPEZ, is the leading article in "*The Tea and Coffee Trade Journal*," for January. The paper is a pen picture of the country and contains many valuable hints in the way of coffee cultivation.



THE GOVERNOR'S PALACE AT VALPARAISO, CHILE.

View of the new Intendencia, or Governor's Palace, at Valparaiso, taken Children's Day during the Centennial Celebration.

"**Commercial Peru,**" by JOHN J. MCFARLANE, is the principal contribution in the February number of "*Commercial America,*" and the statistics show that that country is a field of great possible exportation. We give the table of detailed exports in proof of this assertion:

*The leading articles exported from Peru in 1907, with their value and principal countries of destination.*

| Articles. | Value. | Principal countries of destination. |
|---|---|---|
| Mineral and metals | $10,015,000 | United States, United Kingdom. |
| Rubber | 4,723,000 | United Kingdom, United States, France. |
| Sugar | 4,136,000 | United Kingdom, United States. |
| Cotton | 2,581,000 | United Kingdom. |
| Wool | 2,140,000 | Do. |
| Guano | 1,960,000 | Do. |
| Hides | 620,000 | United States, United Kingdom. |
| Hats | 484,000 | United States, France, United Kingdom. |

Peruvian cotton is rapidly making a place for itself in the world market, and the exports of this commodity, which have steadily increased within the last 10 years, show conclusively that the climate and soil of a great part of this Republic are entirely fitted for cotton cultivation.

The copper mines of Peru are, of course, famous, as well as the silver mines. It is somewhat of a surprise, however, to realize that Peru exported coal to the value of half a million dollars in 1907.

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"**The Production of Rubber in Peru,**" by CARLOS ROMERO and F. E. ROSS, is an instructive paper appearing in "*Peru To-Day*" for January. The author gives details of methods of working, laborers' wages, exportation, and land grants from the Government for rubber cultivation. We quote the following:

Montaña land grants: Indigenous rubber lands may be purchased on very favorable terms from the Peruvian Government, or may be rented for periods of 10 years on payment by the concessionaire of $1 per hundred-weight of rubber extracted, or on the basis of payment of 10 cents for every estrada of 150 trees worked, in addition to an equal sum per hectare of land comprised in the grant. The requirement is compulsory that rubber extracted from lands sold by the State must be exported from a Peruvian port. In any of the above cases the destruction of the trees is absolutely forbidden.

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"**Mining Operations in Peru in 1910,**" by F. E. Ross, in "*The Engineering and Mining Journal,*" for March 4, 1911, states that the mining industry is in a very prosperous condition at present in Peru. The work at Ferrobamba, a new copper property in southern Peru is being pushed rapidly, while improvements and developments are being contemplated in all of the other Peruvian mines.

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"**Mexican Rubber Notes,**" appearing in "*The India Rubber World*" for March 1, gives the following table that is of considerable interest, as tending to show a decided increase in the gum-chewing habit among the citizens of the United States:

The output of chicle gum from Mexico—the chief source of supply—continues to increase, as shown by the following figures compiled from the annual statement of the Federal treasury submitted to the Congress now in session. Weights are expressed in metric tons and values in Mexican silver. The fiscal year ends June 30:

| Years. | Tons. | Dollars. | Years. | Tons. | Dollars. |
|---|---|---|---|---|---|
| 1905–6 | 2,182 | 1,696,523 | 1908–9 | 2,624 | 2,447,041 |
| 1906–7 | 2,166 | 2,144,724 | 1909–10 | 3,173 | 3,409,567 |
| 1907–8 | 2,295 | 2,251,520 | | | |

"**Railroads in Northern Mexico,**" by A. Coll, is the subject of a short article in "*The Mining World,*" for March 4, 1911.

"**Coasting Down Popocatapetl,**" by Alexander Hume Ford, appears in "*The Mid-Pacific,*" for January.

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Mining in Mexico is extensively reviewed in the annual review number of the "*Mining and Scientific Press,*" of January 7. This periodical contains a résumé of the mining situation in all the different countries of the world for the last year.

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"**Mining in Mexico in 1910,**" by Kirby Thomas, "**Mining in Sinoloa During 1910,**" by E. A. H. Tays, and "**Mining in South America in 1910,**" are some of the leading articles dealing with the mineral industry that appear in the January number of "*The Engineering and Mining Journal.*"

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"**Costa Rica Mineral Resources,**" by Lee Fraser, is the leading article in "*Mining and Scientific Press,*" for January 21, 1911.

After going into a general discussion of the possibilities of mining in this progressive Central American State, the author located the mining districts of the country as follows:

Atlantic Coast: Cuartos Esquinas, black sand; Puerto Limon, natural cement; south of Puerto Limon, black sand; Puerto Viejo, black sand and gold; Rio Zhorquin, gold in sands; Rio Uren, gold in sands at headwaters; Rio Cuculis, coal; Rios Coen and Suagbli, oil; Rio Zent, copper; Montana Matina, coal; Calobozo, iron.

Cartago: Paraiso, copper, gold; Orosi, copper, gold, silver; El Copey, gold.

South of Rio Grande and north of Cerros del Puriscal, there are many occurrences of gold, lead, silver and copper throughout the region.

San Ramon, Naranjo, San Mateo, and Esparta, Tuccares, and the Guacimal, Aranjues, Largatos, Abangares Rivers, gold, silver, lead, zinc, iron.

Laguna Teborio: Iron, gold.

Guanacaste, Sardina: Asphalt, manganese, copper.

Actual mining operations for gold are being conducted in the Abangarez gold fields of Costa Rica by the Montezuma Mining Company of Costa Rica. At the La Union mine, the property is being developed, and some work is being done by the Aquacate Mines in reopening some abandoned properties near San Mateo.

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"**Vuelta Abajo,**" is the leading article in "The Cuba Magazine" for January, and here the author, Miss I. A. Wright, describes this world-famous tobacco growing country.

Other leading articles are "**Gold in Cuba,**" "**Bibijaguas,**" by Isaiah L. Roberts, "**Report of Harvard Experiment Station,**" and "**Irrigation,**" Part IV, by J. T. Crawley.

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"**El Cobre Mines, Cuba,**" a descriptive article by E. G. Tuttle, appearing in "*Mines and Minerals,*" for March, 1911, goes into the details of this ancient and historic mineral deposit. The article is illustrated by a number of cuts, an interesting one showing a view of the mining works in Cobre, in 1820.

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"**The Dominican Republic—Her Resources and Strategic Commercial Position—Influence of Panama Canal on Her Development—Wonderful Country of Toussaint L'Ouverture,**" is an excellent statistical article published in the "*Agwi Steamship News.*"

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"**The Cotton-Spinning Industry of Central and South America.**" A letter from a correspondent of the "*Economist,*" appearing in the February 18 number, contains a good deal of important information on the subject. The corollary of the development

of cotton spinning in Latin America is the development of cotton raising. An enlightening table is given in this letter, and we take the opportunity of quoting it:

| | Mills. | Spindles. | Looms. |
|---|---|---|---|
| Brazil | 137 | 1,000,000 | 35,000 |
| Mexico | 139 | 726,200 | 25,300 |
| Peru | 7 | 52,200 | 1,750 |
| Colombia | 5 | 20,000 | 300 |
| Venezuela | 2 | 11,000 | 250 |
| Argentina | 6 | 9,000 | 1,200 |
| Guatemala | 1 | 6,000 | 150 |
| Chile | 3 | 5,000 | 400 |
| Ecuador | 4 | 5,000 | 200 |
| Uruguay | 3 | ..... | 300 |
| Total | 307 | 1,834,400 | 64,850 |

This increase in the number of cotton mills and spindles in different Latin American countries is sure to have an adverse effect upon the cotton-goods trade of England and Germany, and in a lesser degree the United States. What the author says about the Brazilian mills is significant. (We have italicized.)

The most important of the cotton-manufacturing countries is Brazil; the annual output exceeds £8,330,000, about two-thirds the requirements of the country. The goods manufactured are mainly grays and coarse, colored cottons under 28 inches wide; there are also several print mills with 30-inch printing machines. In some cases white shirtings are made, also muslins, lawns, and fancy work of good quality. With good management large profits are obtained; mills in the interior have an advantage over imported goods, as the cost of carriage from the coast is very great. The average profit may be assessed at 8 per cent, which is maintained at a steady level by the import duties. There is, moreover, considerable competition between the native mills, which prevents profits rising to a higher level. It is remarkable that whilst cotton is grown in northern Brazil, the mills are mainly in the south, and the separate States forming Brazil have internal duties, which raise both the price of the cotton and the goods. There is, moreover, a direct tax on all mill sales, and each bolt of cloth turned out requires a Government stamp. The machinery imported from Great Britain is subject to heavy duties, consequently the industry at every stage adds considerably to the public revenue; notwithstanding, *it seems probable that within another decade the whole of the home market will be supplied by local mills fitted up with English machinery.*

About half the mills are run by steam power, one-fourth by water, and the remainder by electric power, at a cost of about £10 8s. per horsepower (per annum). The operatives are mainly men and boys, and most of the overseers and foremen are English. The mills vary considerably in size, and resemble the smaller American mills rather than the larger English ones in the number of spindles. There are 11 in Brazil with 25,000 spindles each; the largest contains 56,390 spindles, and 1,336 looms, finding work for nearly 1,700 workpeople. Another Brazilian mill has no less than 1,700 looms and 36,000 spindles, employing 2,200 operatives; the cloth made ranges from 28 to 54 inches in width. This mill turns out sheeting, drills, checks, stripes, dyed goods, white goods, and dobby work; also by hand and power, Jacquards, bedspreads, vesting, ribbons, and hosiery from special machines. The waste is also worked up at the mill, producing scrubbing cloths and sacks for native flour. In the same mill the cotton is ginned, and the seeds are crushed for their oil, which is worked up into soap. It is doubtful whether any other mill exists in which so many processes are carried on under one management in one group of buildings. The operatives work 9½ hours a day—from 6 to 10, 11 to 1, and 1.30 to 5. Every Saturday the mills close at 3.30, giving a 55-hour week.

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"**The Railways of Brazil,**" a continuation of the previous articles that have appeared in "*Cassier's Magazine,*" from the pen of Mr. LIONEL WIENER. In this number he takes up a description of the Mogyana system. "**The System of the Brazil Railway Company**" is another well-illustrated paper in the same magazine.

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"**Touring in 'The Land of To-morrow,'**" an article appearing in the Club Journal of February 4, describing the possibilities of Cuba as a motorist's heaven.

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"**Hongo del Caucho,**" is the leading article in the February number of "*La Hacienda.*"

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"**Brazil's Progress in Psychiatry, Neurology, and Legal Medicine,**" by the editor, is a technical article that appears in the "*Medico-Legal Journal,*" for September, 1910.

The "**Fight for South America's Great Trade,**" is the heading of an interview with Mr. LEWIS NIXON, appearing in the "*Pan American Review.*" Mr. EDWARD MARSHALL, the well-known correspondent, handled the interview, and he developed a good deal of interesting information by skillful questioning. On the subject of American investment, Mr. NIXON has this to say:

American investment in the Argentine is confined almost wholly to the meat industry. The La Plata works, a few miles from Buenos Aires, have made a magnificent development. They ship to Europe vast aggregates of chilled beef, employing for this exportation a whole line of steamers.

At present South America's most puzzling problem is its lack of fuel. Coal costs $9 at the seaboard and $14 to $20 in the mountains. It will be hard, even if coal exists, as has been claimed, on the west slope of the Andes, to get it across the mountains. Railroad fuel in the north is mostly quebracho wood. This is a heavy handicap. In the south petroleum is used.

The mention of it brings to mind a failure of American manufacturers to get control of the big locomotive market offered by the Argentine. In 4 locomotives ordered from a North American firm, copper fire boxes and flues were specified. Our builders scorned this detail, not understanding it. It really was due to the peculiarities of this wood fuel. We sent steel boilers and steel fire boxes, and now the engines all lie in the scrap heap, having been replaced by English locomotives, whose builders did as they were told to do in specifications.

If we wish to get our share of the great trade which it is increasingly in the power of South America to give us, we must adapt ourselves more readily to their conditions and meet them as the foreign manufacturers are meeting them. South America is anxious to do business with us. As soon as we show any willingness to really meet her needs and to provide the trade and financial plants to handle our joint commerce, we shall control our rightful share of her whole trade—which we do not at present do.

But we must meet them halfway, for at present trade comes in spite of us and not through our enterprise.

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"**The Rubber Workers of the Amazon,**" by A. LANG, and "**The Economic Importance of the Plateaus in Tropic America,**" by Prof. J. RUSSELL SMITH, of the University of Pennsylvania, are two other important papers in the "*Bulletin of the American Geographical Society*" for January. Professor SMITH makes an interesting point relative to the sites of cities:

The location of cities in tropical America shows forcibly the importance of the plateau. In temperate North America and in northern Europe there is no national capital that is not located on a low plain, many of them are seaports, and all can be reached from the sea by at least river or canal navigation. In all tropical America there are 11 independent nations, including Panama, and of the 11 but 1, Brazil, has a capital city that is also a seaport. Even the Brazilian capital is not fully maritime, since the suburb of Petropolis, on the escarpment of the plateau, is the real administrative center, the residence of the diplomatic corps and the Brazilian aristocracy, and has also a growing textile industry.

The other 10 capitals of the American Tropics are beyond the reach of any kind of navigable connection with the ocean, and are usually situated upon plateaus from 2,000 to 9,000 feet in elevation, where good drainage and cool and wholesome climate prevail.

In the above statement the author evidently excludes Central America and the West Indies from tropical America.

And in regard to the further peopling of the lowlands, he has this to say:

The other means of peopling these lands is by the application of science to eliminate the tropical diseases that are now so fatal to white men and harmful to others. This is a possibility which is just arising, but which may rediscover to us the New World during the present century. Most of the particularly troublesome and so-called contagious diseases are now explained as due to or transmitted by the activity of animal organisms of various kinds. Once the danger is known it may usually be averted by combating some insect or germ or by inoculating the person so that the germs have no effect. Within the memory of living men smallpox has declined from the position of the world's greatest plague to a second-rate disease, due only to carelessness. The germ of typhoid fever is known and with care the disease can be controlled and prevented. Millions of our contemporaries have followed the steps by which mosquitoes have been proved the guilty agents in the spread of the dread and mysterious yellow fever, and the disease has in places been stamped out completely. In the same way the sleeping sickness of Africa is now known to be due to a variety of the tsetse fly, and malaria, the bane of Tropics and lowlands everywhere, is now explained by science as another of the insect-carried diseases. As medical science has just begun systematically to study these questions, it is fair to presume, in the light of present progress, that the time is not far distant when it may be almost or quite as easy to keep free from disease in the Mexican plains, in the Amazon or the Magdalena Valleys, as in the Mississippi Valley.

"**United States Banking with Latin America**" is the title of an article appearing in "*The Bankers' Magazine*" for February. This contains the conclusions of Señor V. Gonzales Bazo, and because of the interest of the subject we quote extensively:

In reply to your request for my opinion on the prospects for American capital in the field of Pan-American banking, I would say at the outset that there is a very wide difference between banking with Latin America and banking in Latin America. Both can be combined, but it is not absolutely necessary.

The field for banking with Latin America is yet very large. The exports from the 20 countries amount to $1,250,000,000, and this sum all represents banking business. This figure is increased by the several hands through which the operations pass, as exporters do not always sell exchange to importers. As a rule drafts with bill of ladings attached go to banks, which retail the exchange afterwards at a profit. A large portion of the exporting trade is done on credit, and the paper is discounted (bought) by local banks and rediscounted in Europe (and perhaps this country), exchange through short-sight drafts being sold to importers. I presume that the total amount of drafts drawn by Latin America on foreign countries including Government remittances, as well as foreign corporation dividends and interest and profits of foreign capital invested in all these countries, exceeds $2,000,0000,000 every year.

I believe that outside of covering the American imports by exchange on this country the share of American banking interests in these transactions is very small.

That the share of the United States can be larger, and should be larger, is beyond doubt. Of our total exports of $1,250,000,000, you take more than $400,000,000; that is, the largest portion. England takes $220,000,000, Germany $146,000,000, and France $107,000,000, the rest being divided among all other countries, and still this country has the smallest share in the banking business. Your exports to Latin America amount only to a little over $200,000,000, and the balance of $200,000,000 that you have to pay us for is settled by your payments to Europe for our account. In short, you are paying to Europe a part of the surplus they have in their trade balance with us, including our financial tribute.

The United States is the largest consumer of coffee (500,000 tons per annum), and practically the whole crop is raised in Latin America (1,100,000 tons). Why then is the market regulated in Europe? Why is the market of cocoa regulated in Europe also, the United States being the largest consumer (55,000 tons) and 75 per cent (150,000 tons) of the total production (200,000 tons) being produced in Latin America? The total crop of ivory nuts (25,000 tons) is produced in Latin America; the United States is the largest consumer (40 per cent, or 10,000 tons); why is its market regulated in Hamburg? There are a few more staple products of Latin America the largest consumer of which is the United States and the markets of which are likewise regulated in Europe.

I believe that this is due simply to the lack of American banking facilities with Latin America.

Mr. Bazo gives the following information relative to the gold and silver standard countries in Latin America:

There are 10 countries under the gold standard—Mexico, Panama, Costa Rica, Ecuador, Peru, Bolivia. Uruguay, Venezuela, Santo Domingo, and Cuba—where the margin is about 4 per cent (2 per cent above and 2 per cent below the gold point); 1 country under the silver standard (Salvador), where there are two fluctuations, within the gold point and according to the price of silver; and 9 countries having a paper currency—Argentina, Brazil, Chile, Paraguay, Guatemala, Honduras, Nicaragua, Colombia, and Haiti—the two first of which only have a guaranteed rate of exchange and where it fluctuates within the gold point, and 7 others having unlimited and entirely unrestricted fluctuations.

The author continues in taking the point of view that the establishment of American banks in Latin America would undoubtedly increase trade, and also put the American merchant in a more advantageous position in carrying on this trade than he is at present. As to the different characters of banking business that could be established, Mr. Bazo has this to say:

Banking in Latin America has, as well as in any other country, several spheres. There is agricultural banking, industrial banking, and commercial banking. Agricultural banking is generally the safest, but it means a long-term investment and a lower rate of interest. It is subject to the possible accidents to the currency, as nobody will contract but in local currency. It may be safe for a while, it may be safe forever, but it may fail.

Industrial banking pays better, but it involves a little more risk, as industrial conditions in every part of the world have no guaranty whatever against the future. National industries in any country may fail one day for unforeseen reasons, and this is another risk added to the currency risk.

Commercial banking, in many of the Latin American countries, where there are no regular stock exchanges, comprises the banking operations incident to the handling of stocks and bonds, and though the watering process is still a bit foreign to us the same game of protecting them too much is seen very often. Stocks and bonds find their way to the banks and absorb a lot of the disposable money, unloading too heavy markets, and there are great risks in it down there where they can not be floated easily on other markets.

The author concludes with a high appreciation of the character of the American people.

"**To South America,**" the first of a series of articles by Mr. THEODORE W. NOYES, appears in "*The Evening Star*" of Washington, D. C., for January 12, 1911. "**The Roof of the World,**" in the issue of February 20, 1911, and "**Above the Clouds,**" in the issue of February 21, are two other articles forming the series in this newspaper, and because of the awakened interest in Latin American affairs should be appreciated by the general reader. The articles contain vivid descriptions of the countries visited by Mr. NOYES and a wealth of data that only an industrious traveler with a keen sense for news could collate.

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"**Naval Strength of South America,**" the leading special article of the South American "*Supplement of the Times*," gives a review of the sea forces of the South American countries, by Commander E. HAMILTON CURREY, Royal Navy, ending with a forecast as to the future, in which the author quotes Señor LARRETA, the Minister for Foreign Affairs of Argentina, speaking of Argentina, Brazil, and Chile, as saying: "We are the three most powerful nations in South America. We must direct them in the path of peace and progress. The other nations will see in this triple friendship a powerful guaranty of liberty and justice."

Other special articles are "**Progress of South America: La Paz, Iquique, and Antofogasta,**" "**A Run North in Argentina,**" "**Venezuela and Its Future,**" "**Portuguese in Brazil,**" "**Historical Sketches: IV. Period of the Revolutions,**" "**Lima as a Literary Center,**" "**British Opportunities in Brazil,**" "**Preparation of Mandioca,**" "**The 'Popol Vuh,'**" by LEWIS SPENCE, and "**Brazilian Trade in 1909.**"

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"**The Dawn of the World's Peace,**" by HAMILTON HOLT, in the March number of "*The World's Work*," is an article reviewing the efforts of all the nations of the world toward advancement of permanent peace conditions. After taking up the different methods pursued by various countries to accomplish this much-to-be-desired result, the author gives especial study to the creation of the Pan American Union and the work being carried on by this institution.

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The two principal articles in the March number of "*La Hacienda*" are "**Fibra del Zapupe**" and "**Cultivo del Algodonero Caravonica y Otros.**"

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The twelfth article of the series on "**The Railways of Brazil,**" by LIONEL WIENER, appears in the March issue of "*Cassier's Magazine.*"

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"**The Geography and Natural Resources of Bolivia,**" and "**Canal Projects in the Isthmus of Panama and Adjacent Regions,**" by H. J. PEDDIE, are two of the articles in "*The Scottish Geographical Magazine*" for January.

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"**The Lake of Gold of the Talamancas,**" by CHARLES MELVILLE BROWN, "**The River of January,**" by JAMES FRANCIS OLIVER, and "**The International Bureau of American Republics, Its Mission, and Its Director,**" by KATHERINE L. SMITH, are contained in the January number of "*The New Age.*"

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"**Captain Innocencio,**" a strong short story by REX BEACH, in "*McClure's Magazine*" for February, has for its motive the law and tradition of the San Blas Indians forbidding marriage with aliens.

# LATIN-AMERICAN NOTES

### MEMENTO OF SPANISH AMERICAN COMMERCIAL UNION BANQUET.

The Pan American Union takes pleasure in extending its thanks to Mr. R. A. C. Smith, of 100 Broadway, New York, for his kindness in presenting to it a framed menu of the Spanish American Commercial Union banquet held in New York, December 20, 1889. The banquet was tendered in honor of the delegates to the International American Conference by the Spanish American Commercial Union, of which Mr. Smith was an officer at the time. Hon. Elihu Root was one of the distinguished guests at that function. This interesting memento, in its attractive make-up, now occupies a conspicuous place in the office of the Assistant Director, and is proving of great interest to the many visitors to this institution.

### RESOLUTION FOR MEETING OF PARLIAMENTS AND LEGISLATIVE BODIES OF THE WORLD.

Through the instrumentality of William Osborne McDowell, LL. D., president of the United Nations of the World in the League of Peace, with the title of "The Peacemaker," there was presented at the third session of the Sixty-first Congress of the United States a joint resolution "to authorize and provide for a joint assembly and meeting of the parliaments and national legislative bodies of the nations of the world in the United States, and to extend an invitation to said parliaments and legislative bodies, and for other purposes." This organization is deserving of special commendation for the effective work it is doing in awakening public sentiment in their international peace propaganda and hospitality work.

### THE COLLVER TOURS.

The Pan American Union is in receipt of an announcement stating that the Bureau of University Travel has purchased, in due legal form, the name of "The Collver Tours" and other intangible assets of The Collver Tours Company, and will conduct the business as a department of their establishment. The Bureau of University Travel maintains its offices at Trinity Place, Boston, Massachusetts. Pamphlets are now available descriptive of the extensive "All South American" tour arranged by this company. It is planned to sail from New York on Saturday, July 8, 1911, returning to New York Tuesday, October 3, 1911. The itinerary includes stops at Cuba, Jamaica, Panama, Ecuador, Peru, Bolivia, Chile, Argentine Republic, Uruguay, Brazil, and the West Indies.

### FIRST UNIVERSAL RACES CONGRESS.

The program of the First Universal Races Congress, which is to meet in London, England, July 26–29, 1911, has just been issued. The object of this gathering, as given in this pamphlet, is "to discuss in the light of modern knowledge and the modern conscience the general relations subsisting between the peoples of the West and those of the East, between the so-called white and so-called colored peoples, with a view to encouraging between them a familiar understanding, the most friendly feelings, and a heartier cooperation." Among the supporters of this movement are over 25 presidents of Parliaments, the majority of the members of the Permanent Court of Arbitration, and of the delegates to the Second Hague Conference, 12 British governors, and 8 British premiers, over 40 colonial bishops, some 130 professors of international law, the leading anthropologists and sociologists, the officers and the majority of the council of Inter-Parliamentary Union, and many other distinguished personages. No less than 50 different countries are to be represented at this Congress, prominent among which are many from Latin-American Republics.

# SUBJECT MATTER OF CONSULAR REPORTS

## REPORTS RECEIVED TO FEBRUARY 15, 1911.

| Title. | Date. | Author. |
|---|---|---|
| ARGENTINA. | | |
| Commemoration of the Argentine centenary, photographs of, and account, Plaza del Congreso. | Nov. 5 | R. M. Bartleman, Consul General, Buenos Aires. |
| Argentine Industrial Census, No. 11, for Provinces of Santa Fe and Salta. | Nov. 11 | Do. |
| Argentine crop prospects and situation (Mr. Bartleman's No. 180, of December 30, 1909, continued). | Nov. 18 | Do. |
| Trade notes of Rosario and Consular District: Mendoza, one of the most flourishing Provinces of Argentine Republic. Latest census returns show following data: Population is 206,393, only 98 of the inhabitants being Americans; total value of all live stock in Province shows an aggregate amount of 14,283,389 pesos. The vineyards produce 117,000,000 Kilos of grapes, from which are extracted 90,000,000 liters of wine. The Province of Santa Fe is to have a new railroad in near future. The Rosario Western Railway Co., with capital of several million dollars, was recently registered in London. During first nine months of the current year the Rosario Tramway Co. transported 16,116,452 passengers. Work on the Rosario port works is rapidly forging ahead. There are in the Province of Santa Fe 2,951 industrial establishments. | Nov. 19 | H. P. Coffin, Consul, Rosario. |
| Trade notes of Rosario and Consular Districts: An electric light company of Rosario will spend over a million dollars improving and extending the service. New factory will be constructed to be completed in 1911. New cables will be laid, extending to the most important suburbs. The output of sugar from January 1 to October 31 of the current year amounted to 143,782,709 kilos, and the sales to 130,888,837 kilos. The stock, which stood on January 1 at 5,273,265 kilos, is now 18,467,137 kilos. The consumption during the first 10 months of this year is estimated at 186,568,520 kilos. The output for the year is estimated at 143,000,000 kilos. Rapid progress is being made in the city of Cordoba in the extension and development of the electric light and tramway system. The working of the tramways since the close of the financial year, March 31, has shown a satisfactory profit. The provincial legislature of Santa Fe has sanctioned the construction of a central avenue in Rosario. The avenue will be 1,200 meters in length and 42 meters wide, and will extend from Plaza 25 de Mayo through the heart of the city to Plaza Santa Rosa. The electric tramway company of Rosario has forwarded to the municipality a petition asking for an extension in their concession for 25 years, up to September 15, 1985. On December 19, 1910, the new railroad line from Rosario to Puerto Belgrano (on the Atlantic Ocean's coast) will be opened to traffic. The line is 783 kilometers long and will be equipped with engines capable of traveling 120 kilometers per hour. Within a year the port works at Puerto Belgrano will be completed for the shipping of grain. Eight ships can be accommodated at one time. | Dec. 1 | Do. |
| Foreign commerce of Argentina for first nine months of 1910 | ...do | R. M. Bartleman, Consul General, Buenos Aires. |
| Argentine Railway and Land Transport Exhibition, illustrated article regarding the British pavilions of, and commenting thereon. | Dec. 2 | Do. |
| Argentine sugar, statistics regarding, for first 10 months of 1910 | Dec. 6 | Do. |
| Trade Notes: One-tenth of all the books purchased by the faculty of law and social science of the University of Buenos Aires during 1909 were by United States authors, dealing with legal and political themes. More were bought from the United States than from any other foreign country save Italy and Spain. The sheep exported from the Argentine territories of Santa Cruz and the Chubut have done very well in Peru, and it is probable that more will be sent. The recently appointed minister of agriculture is doing everything in his power to promote and judiciously regulate immigration. | ...do | Do. |
| Clipping in regard to consular report on Rosario | Dec. 7 | H. P. Coffin, Consul, Rosario. |
| Free entry for articles for national public enterprises | ...do | R. M. Bartleman, Consul General, Buenos Aires. |
| Argentine crops, 1910–11 | Dec. 8 | Do. |
| Optical goods, sale of, and market for American, in the Argentine Republic. | Dec. 9 | Do. |
| Railway statistics, 1909 | Dec. 10 | Do. |
| Prices of beer in the Argentine Republic | Dec. 12 | Do. |
| Argentine patents, digest of those issued, 1866–1900 | Dec. 13 | Do. |
| Locusts and other agencies injurious to vegetation | Dec. 19 | Do. |

*Reports received to February 15, 1911*—Continued.

| Title. | Date. | Author. |
|---|---|---|
| ARGENTINA—continued. | | |
| Argentine crops, 1910–11; information regarding linseed, and illustrative maps. | Dec. 20 | R. M. Bartleman, Consul General, Buenos Aires. |
| Argentine conversion office and paper circulation | Dec. 21 | Do. |
| Argentine crops, 1910–11 | Dec. 28 | Do. |
| BRAZIL. | | |
| Port charges, facilities for handling cargoes, and other matter concerning importation of merchandise into foreign countries. | Nov. 18 | Jay White, Consul, Santos. |
| Trade opportunities in automobiles | Nov. 28 | Do. |
| Detailed figures of imports of foreign merchandise | Nov. 29 | J. J. Slechta, Vice Consul General, Rio de Janeiro. |
| Beer in Brazil, prices of, market for, etc | ...do | Do. |
| Optical goods in Brazil, market for | ...do | Do. |
| Prices of beer in Bahia | Dec. 6 | S. P. Warner, Consul, Bahia. |
| Improvements, Pernambuco | Dec. 17 | P. M. Griffith, Consul, Pernambuco. |
| Brazilian Budget for 1911 | Jan. 2 | J. J. Slechta, Vice Consul General, Rio de Janeiro. |
| CHILE. | | |
| Postponement of Agricultural Congress | Oct. 31 | A. A. Winslow, Consul, Valparaiso. |
| Wood pulp | Nov. 29 | Do. |
| Trade and Industrial Notes: Bank deposits in Chile amounted to $93,434,910 United States gold on July 31, 1910, against $85,163,355 for June 30, 1909. It is estimated that agricultural products of Chile were valued at $73,500,000 United States gold for 1909. New steel company at Corral, Chile, is preparing to manufactrue creosote as a by-product during the burning of the wood-charcoal to be used in their smelters. Chilean Government has ceded tract of land for this purpose. The parties have about 500 miles of the longitudinal railway north of Valparaiso to construct, and have on the way from Europe 500 laborers in one lot, and propose to repeat this until 2,000 have been brought in for the work. During the first nine months of 1910 the receipts of the Chilean Government railways amounted to $7,697,666 United States gold, against $6,986,251 for the same time during 1909, while the expenses for the same time for 1910 reached $9,468,354, against $9,059,690 for the first nine months of 1909. During the five years ending Dec. 31, 1909, the losses sustained by the fire insurance companies doing business in Valparaiso equaled 61.6 per cent, etc. | ...do | Do. |
| Railroad construction in Chile | Dec. 2 | Do. |
| High-grade coal discovered in Chile | ...do | Do. |
| Electric tram line | Dec. 13 | Do. |
| Trade and Industrial Notes: The wool production of Chile for 1909 amounted to 13,072,220 pounds; potato crop, 6,090,637. Doctor Fraga reports that he has discovered radium in some of the thermal waters of Chile. The first eleven months of 1910 the customs receipts of the Chilean Government amounted to $41,559,076 United States gold, against $36,483,688 for the same period of 1909. It is estimated that English interests now have contracts for construction of railroads in Chile and Bolivia. Tanning industry of Chile holds second place in importance so far as manufacturing is concerned. There are 250 publications of all kinds in Chile, of which 20 are published in Valparaiso and 21 in Santiago; of these, 4 are printed in English, and 2 each in German and French. Government figures just published give the death rate for 1909 in Chile as 31.5 to the thousand. | ...do | Do. |
| New transandine railway | Dec. 14 | Do. |
| Prices of beer | Dec. 16 | Rea Hanna, Consul, Iquique. |
| Law and regulations governing merchandise in transit | Dec. 19 | A. A. Winslow, Consul, Valparaiso. |
| Petroleum prospecting activity in territory of Magellan | Dec. 22 | J. E. Rowen, Consul, Punta Arenas. |
| Suggestions regarding catalogues | Dec. 24 | Rea Hanna, Consul, Iquique. |
| Prices of beer | Dec. 26 | A. A. Winslow, Consul, Valparaiso. |
| Business outlook, and how to get a portion of it | Dec. 27 | Do. |
| Chilean Railroad Notes: Government placed order with American house for 8 vestibuled Pullman and 4 vestibuled dining cars for service between Valparaiso and Santiago. Chilean Government has appropriated money for construction of railroad from Valparaiso to Casa Blanca. Government has set aside $522,139 United States gold for construction of 30 miles of railroad connecting Cajon and Llaima. Work on the Chilean longitudinal railway is progressing north of Valparaiso. Railway from Ligua to Papudo north of Valparaiso was opened to traffic on Dec. 4, 1910. Government commission appointed about a year ago to study question of electrifying Government railway between Valparaiso and Santiago made favorable report and matter is now before Congress for approval. | ...do | Do. |

*Reports received to February 15, 1911*—Continued.

| Title. | Date. | Author. |
|---|---|---|
| CHILE—continued. | | |
| Railroad ties for Chile | Dec. 27 | A. A. Winslow, Consul, Valparaiso. |
| Banking interests in Chile | Jan. 7 | Do. |
| COLOMBIA. | | |
| Opportunities for rubber production | Nov. 18 | Chas. H. Small, Vice and Deputy Consul General, Bogota. |
| Prices of beer | Dec. 19 | Do. |
| Corrections in report dated Dec. 19, 1910, entitled "Prices of beer in Colombia." | Dec. 24 | Do. |
| COSTA RICA. | | |
| Translation of Decree No. 16, regarding customs duties on rails, etc. | Dec. 16 | F. P. Scott, Vice Consul pro tem, San Jose. |
| DOMINICAN REPUBLIC. | | |
| Preliminary surveys for proposed railway from the capital to the Cibao District have been commenced. | Dec. 12 | W. Russell, Consul General, Santo Domingo. |
| Urban telephone system for the Dominican Republic | Dec. 13 | P. E. Holland, Consul, Puerto Plata. |
| Supply of fresh meats in Dominican Republic | do | Do. |
| Restriction of immigration in Dominican Republic | Dec. 16 | Do. |
| ECUADOR. | | |
| Municipal taxes on imports and exports in Ecuador | Nov. 28 | H. R. Dietrich, Consul General, Guayaquil. |
| Contract made between the Government of Ecuador and a steamship company of New York. | Dec. 5 | Do. |
| Prices of beer in Ecuador | Dec. 12 | Do. |
| Total receipts of cocoa in the Guayaquil district during the year 1910. | Dec. 31 | Do. |
| GUATEMALA. | | |
| Vapor gas lamps | Dec. 23 | Geo. A. Bucklin, jr., Consul General, Guatemala City. |
| Cans and canning industry | Dec. 26 | Do. |
| Furniture and furniture parts | do | Do. |
| Export of rubber | do | Do. |
| Water meters and water rates | Dec. 29 | Do. |
| Automatic musical instruments | Dec. 30 | Do. |
| Farmers' boilers | do | Do. |
| Cement machinery | do | Do. |
| HONDURAS. | | |
| Sale of optical goods | Dec. 12 | A. T. Haeberle, Consul, Tegucigalpa. |
| Prevailing prices of beer | do | Do. |
| New steamship service to Honduras | Dec. 14 | C. I. Dawson, Consul, Puerto Cortes. |
| The Agalteca iron mine | Dec. 15 | A. T. Haeberle, Consul, Tegucigalpa. |
| Sale of gasoline ovens | Dec. 17 | Do. |
| Mining possibilities in Honduras | Dec. 19 | C. I. Dawson, Consul, Puerto Cortes. |
| MEXICO. | | |
| Production of tobacco within limits of consular district of Veracruz. | Nov. 10 | W. W. Canada, Consul, Veracruz. |
| Concession to mining company | Dec. 6 | A. V. Dye, Consul, Nogales. |
| Sale of optical goods in La Paz | do | L. N. Sullivan, Consul, La Paz. |
| More Mormons coming to this district | do | L. Ellsworth, Consul, Ciudad Porfirio Diaz. |
| Banana industry | Dec. 8 | A. J. Lespinasse, Consul, Frontera. |
| Rubber industry—exports | do | Do. |
| Market for automobiles | do | T. W. Voetter, Consul, Saltillo. |
| Tuna cheese for United States market | Dec. 10 | W. W. Canada, Consul, Veracruz. |
| Article on irrigation | do | A. V. Dye, Consul, Nogales. |
| Production of alcohol as a by-product of henequen | do | G. B. McGoogan, Consul, Progreso, Yucatan. |
| Tool kits and novelties, how to enter market | Dec. 12 | T. W. Voetter Consul, Saltillo. |
| Market for cement machinery | do | Do. |
| Moving picture machines | Dec. 13 | J. H. Johnson, Consul, Matamoros. |

*Reports received to February 15, 1911*—Continued.

| Title. | Date. | Author. |
|---|---|---|
| MEXICO—continued. | | |
| Candle industry | Dec. 13 | P. C. Hanna, Consul General, Monterey. |
| Production of sesame | Dec. 15 | Marion Letcher, Consul, Acapulco. |
| Firm organized in Mexico City for the purpose of distributing catalogues. | Dec. 16 | C. E. Guyant, Vice and Deputy Consul General, Mexico City. |
| Furniture, agricultural implements, and saddles | Dec. 19 | A. J. Lespinasse, Consul, Frontera. |
| Rubber-producing trees of the west coast | Dec. 21 | G. C. Carothers, Consular Agent, Torreon. |
| Recommendations regarding selling and billing of goods to this consular district. | ...do..... | L. Keena, Consul, Chihuahua. |
| Cost of living in Chihuahua | ...do..... | Do. |
| Sale of optical goods | Dec. 23 | C. A. Miller, Consul, Tampico. |
| Drug and chemical market, and how to enter it | Dec. 24 | S. E. Magill, Consul, Guadalajara. |
| Tuxpam Canal | Dec. 27 | C. A. Miller, Consul, Tampico. |
| Oil industry | ...do..... | Do. |
| Cultivation of pineapples | ...do..... | Do. |
| Cotton | ...do..... | Do. |
| Tampico Notes: Heavy importations of mining and oil-well machinery continue. Recent shipment included two pieces of machinery each weighing 7 tons. One steamer recently brought from the United States 6 new boats. Great deal of activity in the motor-boat business at this time. One company has 2 men on the ground selling and demonstrating its boats and expects to dispose of quite a number within the next month. These boats are in demand by various oil companies, ranches, and farmers along the Panuco and Yamsei Rivers and by the wealthy citizens of this port and vicinity. Improvements being made in telephone service in this part of State of Tamaulipas. A few months ago a concession was granted by the Mexican Government for construction of a narrow-gauge railroad from Arguelles Station, Tam., on the Monterey division of the National Railroad lines, to Xicotencatl. New public schoolhouse. Improvements in slaughterhouse and butcher shops. Parcels post. Mexican asphalt shipments to Canada. Shipments of honey to the United States. Tomatoes and onions. Potatoes. Lumber. Vehicles. | ...do..... | Do. |
| Newly discovered rubber-producing plant | Dec. 29 | R. M. Stadden, Vice and Deputy Consul in charge, Manzanillo. |
| Cultivation of cocoanuts in Colima | ...do..... | Do. |
| Cultivation of henequen on Pacific coast of Mexico | ...do..... | Do. |
| Cultivation of the Roatan banana on the Pacific coast of Mexico. | ...do..... | Do. |
| Statement of declared exports for the calendar year 1910 | Dec. 31 | W. L. Bonney, Consul, San Luis Potosi. |
| Market for gas suction engines in San Luis Potosi | Jan. 3 | Do. |
| Vessels clearing from Tampico for United States ports for the December quarter, 1910, and for the calendar year 1910 | Jan. 5 | C. A. Miller, Consul, Tampico. |
| Summary of exports for quarter ending December 31, 1910 | ...do..... | Do. |
| Increase of exports from the United States to Mexico through port of Nuevo Laredo. | Jan. 6 | A. B. Garrett, Consul, Nuevo Laredo. |
| Mexican mining labor | Jan. 7 | C. M. Leonard, Vice Consul in charge, Chihuahua. |
| Declared exports to the United States for the calendar years of 1909 and 1910. | Jan. 9 | C. M. Freeman, Consul, Durango. |
| Annual report on commerce and industries | Jan. 12 | Do. |
| Bonding government employees | Jan. 16 | Wm. W. Canada, consul, Veracruz. |
| New metallic rod packing | Jan. 24 | W. L. Bonney, Cousul, San Luis Potosi. |
| Salt industry of Tamaulipas | Jan. 26 | C. A. Miller, Consul, Tampico |
| Guayule shrub and crude rubber from same | Jan. 28 | L. T. Ellsworth, Consul, Ciudad Porfirio Diaz. |
| NICARAGUA. | | |
| Prices of beer | Dec. 14 | W. H. Seal, Vice Consul, Cape Gracias a Dios. |
| Price of beer | ...do..... | J. W. Johnson, Consul, Corinto. |
| Payment of duty on postal packages | Jan. 5 | Jose de Olivares, Consul Managua. |
| Exemption from duties on gasoline light accessories imported into Nicaragua. | Jan. 12 | Do. |
| PANAMA. | | |
| Prices of beer | Nov. 25 | A. G. Snyder, Consul General, Panama. |
| Imports into Panama for the first six months of 1910 | Dec. 5 | Do. |
| Law No. 13 of Nov. 15, 1910, relative to fishing for mother-of-pearl shell. | Dec. 12 | Do. |

*Reports received to February 15, 1911*—Continued.

| Title. | Date. | Author. |
|---|---|---|
| PANAMA—continued. | | |
| Notes of General Interest: Prices of water in Panama and Colon. Canal Zone tax on vehicles. Licensing and regulation of motor vehicles in the Canal Zone. Panama-David Ry. Fire insurance legislation. Chinese lottery to be abolished. Wireless telegraph station at Colon. | Dec. 21 | A. G. Snyder, Consul General, Panama. |
| New municipal tax | Jan. 6 | James C. Kellogg, Consul, Colon. |
| PARAGUAY. | | |
| Knit-goods trade | Nov. 10 | C. Ferris, Consul, Asuncion. |
| Sale of schoolbooks in Paraguay | Nov. 15 | Do. |
| Summary of annual report of the Paraguay Central Ry. Co. for the year ended June 30, 1910. | Nov. 28 | Do. |
| Electric tramway, light and power for Asuncion | Dec. 1 | Do. |
| Successful method of introducing goods into Paraguay | Dec. 2 | Do. |
| Import trade methods | Dec. 16 | Do. |
| Production and prices of beer | Dec. 21 | Do. |
| SALVADOR. | | |
| Prices of beer | Dec. 14 | T. E. Dabney, Consul General, San Salvador. |
| Sale of optical goods in Salvador | Dec. 21 | Do. |
| URUGUAY. | | |
| Moving picture theaters in Montevideo | Nov. 19 | Frederic L. Goding, Consul, Montevideo. |
| Opportunity for American motor boats in Uruguay | Nov. 22 | Do. |
| Uruguay Notes: President has recommended the purchase of material for luminous buoys and beacons for entrance channels to port of Montevideo and to mark shoal waters on coast. German capitalists are interested in establishing sugar factory and refinery in Uruguay. Beet-root alcohol factory is to be installed in the town of Progreso in the Department of Canelones. Preliminary work is being pushed for the installation of the wireless telegraph station at Cerrito, apparatus for which is due from Germany in a few weeks. General inspection of highways has drawn up conditions of a tender to be advertised for bids on the construction of a bridge over the Batovi arroyo in the Department of Tacuarembo. | Dec. 20 | Do. |
| VENEZUELA. | | |
| New banking project for Venezuela | Nov. 23 | I. A. Manning, Consul, La Guaira. |
| Sale of optical goods abroad | Dec. 2 | R. J. Totten, Consul, Maracaibo. |
| Coffee and coco crops in Venezuela | Dec. 3 | Do. |
| Interest in banana culture in Venezuela | Dec. 6 | I. A. Manning, Consul, La Guaira. |
| Steamship contracts in Venezuela | ...do... | Do. |
| Mining district of Venezuelan Guayana | Dec. 9 | Do. |
| New electric and power company organized in Caracas | Dec. 14 | Do. |
| Jewelry trade in the Maracaibo district | Dec. 17 | R. J. Totten, Consul, Maracaibo. |
| Margarita Island, Venezuela, review of its industry and commerce. | ...do... | I. A. Manning, Consul, La Guaira. |
| Tariff changes in Venezuela | Dec. 26 | Do. |
| Import duty to establish fund for sanitary work in Venezuela | Dec. 31 | Do. |
| Cable interruption interferes with North American trade | ...do... | Do. |
| Maracaibo Notes: Red D Line of steamships have changed schedule for steamers which touch at Venezuelan ports and have added Mayaguez, Porto Rico, to their itinerary. New electric-light plant for city of Valera has been installed and will commence operating early part of March. Strike of butchers and stockyard men of Maracaibo has been arranged to satisfaction of all. Contract submitted to the city council for construction of two electric tram lines for city of Maracaibo. Project for canalization of bar at entrance of Lake Maracaibo is receiving considerable attention. Work has temporarily ceased at the Inciarte asphalt lake on the Limon River. A company of American capitalists have sent an agricultural expert to investigate certain public lands south of Lake Maracaibo with the intention of establishing extensive fruit plantations. Party of American naturalists from Chicago museum are now in the interior of State of Zulia. Reading room of this office is becoming more and more popular as the business men are discovering the many advantages to be derived therefrom. | Jan. 20 | R. J. Totten, Consul, Maracaibo. |

# ARGENTINE REPUBLIC

## BUDGET FOR 1911.

The Argentine Congress has approved the general budget bill for the year 1911. The revenues are estimated at 87,066,681.37 pesos gold and 124,459,318.75 pesos paper. The expenditures are fixed at 27,490,964.71 pesos gold, 260,860,188.76 pesos paper, and 102,493,352.77 pesos paper in bonds, and are distributed as follows:

| | Pesos gold. | Pesos paper. | Bonds pesos paper. |
|---|---|---|---|
| Congress | | 4,708,780.00 | |
| Interior | | 36,762,693.09 | |
| Foreign relations and worship | 1,368,901.20 | 2,596,560.00 | |
| Finance | | 15,359,460.00 | |
| Public debt | 26,122,063.51 | 12,688,000.00 | |
| Justice and public instruction | | 51,991,764.33 | |
| War | | 25,196,631.96 | |
| Navy | | 19,608,758.18 | |
| Agriculture | | 13,428,016.20 | |
| Public works | | 18,369,525.00 | |
| Pensions | | 11,500,000.00 | |
| Military purchases and centennial expenses | | 48,650,000.00 | |
| Extraordinary expenses | | | 102,493,352.77 |
| Total | 27,490,964.71 | 260,860,188.76 | 102,493,352.77 |

Peso (gold)=$0.965 United States gold; peso (paper)=$0.44 United States gold.

## FOREIGN TRADE IN 1910.

The Pan American Union has just received the advance statistics of the foreign commerce of Argentina for the calendar year 1910. The total is officially estimated, on the basis of the figures for the first nine months of 1910, at 707,150,764 pesos gold.

A comparison of this total with that of 1909, when it amounted to 700,106,623 pesos gold, shows an increase of 7,044,141 pesos gold in favor of 1910.

The population of the Republic being estimated at 6,500,000, the per capita foreign trade for 1910 is about $109. This means that the nominal value of trade represented by each inhabitant has increased $49 since 1901, when the per capita commerce was $60.

Of the above-mentioned total, 354,583,661 pesos gold were for imports, or an increase of 51,827,566 pesos gold over 1909; and 352,567,103 pesos gold for exports, or a decrease of 44,783,425 pesos gold.

It should be borne in mind, however, that the figures given are merely an estimate, and are, therefore, subject to change.

*Destination of principal exports from Argentina for the year 1910 to European, North American, African, and Brazilian ports.*

| Destination. | Dry ox-hides. | Salt ox-hides. | Horse-hides. | Sheep-skins. | Goat-skins. | Wool. | Hair. |
|---|---|---|---|---|---|---|---|
| | *Number.* | *Number.* | *Number.* | *Bales.* | *Bales.* | *Bales.* | *Bales.* |
| United Kingdom | 6,773 | 204,620 | ..... | 8,540 | 12 | 45,144 | 363 |
| United States | 1,207,680 | 528,223 | 13,254 | 6,000 | 2,749 | 21,957 | 975 |
| France | 58,696 | 53,948 | 222 | 60,386 | 1,525 | 137,901 | 488 |
| Germany | 513,987 | 876,440 | 150,213 | 2,201 | 115 | 106,635 | 431 |
| Belgium | 242,954 | 265,255 | ..... | 1,068 | ..... | 34,577 | 2,233 |
| Italy | 691,189 | 41,348 | ..... | 353 | 3 | 4,522 | 1,211 |
| South Africa | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Brazil | 290 | ..... | ..... | 910 | ..... | ..... | ..... |
| Orders | ..... | 40,500 | ..... | ..... | ..... | ..... | ..... |
| Other countries | 367,534 | 8,556 | 339 | 1,241 | 2 | 8,084 | 6 |
| Total | 3,089,103 | 2,018,890 | 164,028 | 80,699 | 4,406 | 358,820 | 5,707 |
| 1909 | 3,334,828 | 1,984,410 | 258,177 | 81,606 | 6,086 | 411,196 | 6,103 |
| 1908 | 2,844,838 | 1,403,649 | 130,640 | 76,371 | 5,359 | 419,159 | 4,777 |
| 1907 | 2,275,943 | 1,533,153 | 132,138 | 59,260 | 2,678 | 385,402 | 5,054 |
| 1906 | 2,281,673 | 1,621,894 | 208,414 | 60,125 | 9,325 | 385,509 | 4,893 |

| Destination. | Tallow. | | | Frozen beef. | Chilled beef. | Frozen mutton. | Frozen lamb. |
|---|---|---|---|---|---|---|---|
| | Pipes. | Casks. | Hogs-heads. | | | | |
| | | | | *Quarters.* | *Quarters.* | *Carcasses.* | *Car-casses.* |
| United Kingdom | 7,422 | 92,838 | 751 | 1,271,201 | 1,608,608 | 2,408,331 | 434,915 |
| United States | ..... | 286 | ..... | ..... | ..... | ..... | ..... |
| France | 1,132 | 2,249 | 424 | ..... | ..... | ..... | ..... |
| Germany | 1,338 | 40,313 | 566 | ..... | ..... | ..... | ..... |
| Belgium | ..... | 10,058 | ..... | ..... | ..... | ..... | ..... |
| Italy | 3,880 | 10,778 | 3,331 | 11,634 | ..... | 430 | ..... |
| South Africa | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Brazil | 2,874 | 4,642 | ..... | ..... | ..... | ..... | ..... |
| Orders | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Other countries | 1,210 | 23,072 | 52 | 8,179 | ..... | ..... | ..... |
| Total | 17,856 | 184,236 | 5,124 | 1,291,014 | 1,608,608 | 2,408,761 | 434,915 |
| 1909 | 19,939 | 163,216 | 9,824 | 1,512,827 | 1,071,474 | 2,323,953 | 399,917 |
| 1908 | 14,176 | 130,345 | 9,310 | 1,503,101 | 789,348 | 2,906,291 | 359,588 |
| 1907 | 25,924 | 85,073 | 16,590 | 1,327,360 | 439,613 | 2,670,274 | 115,465 |
| 1906 | 19,809 | 68,194 | 3,601 | 1,563,068 | 455,459 | 2,724,364 | 108,667 |

| Destination. | Wheat. | Maize. | Linseed. | Oats. | Barley. | Birdseed. | Flour. |
|---|---|---|---|---|---|---|---|
| | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* |
| United Kingdom | 486,191 | 232,870 | 52,706 | 219,967 | 900 | 580 | 5,838 |
| United States | ..... | 408 | 114,790 | 17 | ..... | 647 | ..... |
| France | 24,007 | 168,880 | 48,636 | 30,361 | ..... | 202 | ..... |
| Germany | 118,721 | 191,569 | 124,431 | 8,007 | 115 | 35 | 1,108 |
| Belgium | 294,429 | 271,583 | 102,600 | 32,911 | 3,092 | 286 | 10 |
| Italy | 63,612 | 194,497 | 11,137 | 54,042 | ..... | 159 | ..... |
| South Africa | 6,757 | ..... | ..... | ..... | ..... | ..... | 224 |
| Brazil | 324,867 | 2,298 | 12 | 13 | 7 | 1,398 | 101,798 |
| Orders | 453,340 | 1,327,617 | 102,894 | 13,423 | 179 | ..... | ..... |
| Other countries | 126,157 | 224,164 | 97,093 | 9,020 | 270 | 432 | 4,568 |
| Total | 1,898,081 | 2,613,886 | 654,299 | 367,761 | 4,563 | 3,739 | 113,546 |
| 1909 | 2,576,009 | 2,336,534 | 918,413 | 435,540 | 15,444 | 5,723 | 111,573 |
| 1908 | 3,606,440 | 1,786,073 | 1,064,605 | 440,216 | 20,809 | 6,859 | 113,554 |
| 1907 | 2,639,994 | 1,295,986 | 778,905 | 147,360 | 4,866 | 22,719 | 122,759 |
| 1906 | 2,680,607 | 2,611,363 | 530,024 | 49,120 | 910 | 16,244 | 125,447 |

*Destination of principal exports from Argentina during the year 1910 to European, North American, African, and Brazilian ports*—Continued.

| Destination. | Bran. | Pollards. | Oilseed cakes. | Quebracho. | Quebracho extract. | Hay. | Butter. |
|---|---|---|---|---|---|---|---|
| | *Tons.* | *Bags.* | *Bags.* | *Tons.* | *Tons.* | *Bales.* | *Cases.* |
| United Kingdom | 6,070 | 43,120 | 54,608 | 205 | 7,142 | ..... | 110,242 |
| United States | ..... | ..... | 64 | 71,690 | 42,239 | 2,709 | ..... |
| France | 12,143 | 68,608 | 15,440 | 17,371 | 2,124 | 10 | 119 |
| Germany | 187,725 | ..... | 192,648 | 112,980 | 5,515 | 4,996 | ..... |
| Belgium | 9,184 | 976 | 17,376 | 14,250 | 2,301 | ..... | ..... |
| Italy | 577 | 1,616 | 672 | 15,120 | 2,062 | 1,030 | ..... |
| South Africa | ..... | ..... | ..... | ..... | ..... | 26,930 | ..... |
| Brazil | 572 | ..... | ..... | ..... | 75 | 581,191 | ..... |
| Orders | 1,783 | ..... | ..... | 116,492 | 557 | 32,390 | ..... |
| Other countries | 15,207 | 19,536 | 41,312 | 54,824 | 6,253 | 47,275 | ..... |
| Total | 233,261 | 133,856 | 322,120 | 402,932 | 68,268 | 696,531 | 110,361 |
| 1909 | 182,521 | 70,494 | 247,184 | 308,480 | 60,328 | 518,443 | 147,723 |
| 1908 | 190,790 | 64,416 | 229,065 | 291,423 | 68,626 | 645,143 | 141,872 |
| 1907 | 188,257 | 161,364 | 179,872 | 301,621 | 57,194 | 841,751 | 112,694 |
| 1906 | 177,859 | 60,830 | 193,815 | 271,670 | 58,955 | 1,469,629 | 170,818 |

AVERAGE WEIGHTS.—1 bale of wool, 400 kilos; 1 bale of sheepskins, 400 kilos; 1 bale of hair, 400 kilos; 1 bale of goat skins, 370 kilos; 1 bale of hay, 50 kilos, 1 pipe of tallow, 400 kilos; hogshead of tallow, 200 kilos; 1 cask of tallow, 160 kilos; 1 case of butter, 25 kilos.

## EXPORTS OF FROZEN MEAT IN 1910.

Although the exports of Argentine live stock have decreased noticeably since the closing thereto of British ports, the exportation of frozen meats, nevertheless, has increased considerably, showing that the restrictive measures adopted at those ports have not affected the Argentine meat trade.

The following table shows the exports of frozen meat in 1909 and 1910:

| Refrigerating plants. | 1909 | | Refrigerating plants. | 1910 | |
|---|---|---|---|---|---|
| | Mutton carcasses. | Beef quarters. | | Mutton carcasses. | Beef quarters. |
| Compañia Sansinena | 736,518 | 363,076 | Compañia Sansinena | 716,583 | 325,915 |
| The River Plate Fresh Meat Co | 408,819 | 428,343 | The River Plate Fresh Meat Co | 466,402 | 526,957 |
| Las Palmas Produce Co | 477,889 | 335,396 | Las Palmas Produce Co | 350,778 | 335,557 |
| La Blanca | 190,568 | 385,726 | La Blanca | 346,132 | 429,197 |
| La Plata Cold Storage Co. | 652,055 | 583,417 | La Plata Cold Storage Co. | 741,722 | 849,542 |
| The Smithfields Argentina Meat Co | 1,699 | 228,345 | The Smithfields Argentina Meat Co | 3,076 | 201,704 |
| Frigorífico Argentino | 196,322 | 258,998 | Frigorífico Argentino | 218,983 | 230,770 |
| Frigorífico Uruguayo | 145,886 | 103,061 | Frigorífico Uruguayo | 232,351 | 143,064 |
| Rio Seco | 163,995 | ..... | Rio Seco | 185,127 | ..... |
| San Gregorio | 178,193 | ..... | San Gregorio | 152,571 | ..... |
| Total | 3,151,944 | 2,686,362 | Total | 3,413,725 | 3,042,706 |

## THE FIRST CORN-EXPORTING COUNTRY.

Five years ago, during the 1905–6 crop, the Argentine Republic exported 2,524,000 tons of corn, while the United States exported 2,909,000 tons. Also in 1906–7 the latter country exported more corn than Argentina, but after that year the South American Republic heads the list of corn-exporting countries.

Nearly all the countries produce corn, but not in such quantities that it can be exported. Only the United States, Argentina, Russia, and the Danube countries are at present able to ship corn abroad, their exports during the last five years having been as follows:

(*Crop years from November 1 to October 31.*)

| Exporting countries. | 1909–10 | 1908–9 | 1907–8 | 1906–7 | 1905–6 |
|---|---|---|---|---|---|
| | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* |
| United States | 705,000 | 753,000 | 740,000 | 1,947,000 | 2,909,000 |
| Argentine Republic | 2,270,000 | 2,276,000 | 1,773,000 | 1,679,000 | 2,524,000 |
| Russia | 358,000 | 536,000 | 477,000 | 844,000 | 147,000 |
| Danube, etc | 782,000 | 848,000 | 867,000 | 1,576,000 | 461,000 |
| Others | 170,000 | 96,000 | 74,000 | 19,000 | 9,000 |
| Total | 4,285,000 | 4,509,000 | 3,931,000 | 6,065,000 | 6,050,000 |

From the above figures it is inferred that the universal demand for corn has diminished by nearly 2,000,000 tons in the last five years, due, no doubt, to the scarcity of this commodity. The Argentine Republic has always found a ready market for its surplus production of corn.

## INTERNAL REVENUES FOR 1910.

The internal revenue collected in the Argentine Republic during 1910 for territorial taxes, licenses, and stamps, amounted to 32,450,025.41 pesos, as compared with 29,612,056.54 pesos in 1909, or an increase of 2,837,968.87 pesos.

The internal taxes, which include those on alcohol, tobacco, matches, beer, insurance, playing cards, artificial and specific beverages, and perfumes, amounted, in 1910, to 50,610,289.96 pesos, as compared with 47,937,584.55 pesos in 1909.

## IMMIGRATION IN 1910.

The number of immigrants arriving in the Argentine Republic in 1910 was 289,640, and the number leaving during that year was 97,854, or a net gain, for that year, of 191,786. The total arrival of immigrants for the 10 years from 1900 to 1910 was 1,848,954, and the total number of departures was 682,258, making a net gain, during the 10 years, of 1,166,696.

## NEW IMMIGRANT HOTEL.

A magnificent new building at Buenos Aires, to be known as the Immigrants Hotel, was recently inaugurated by the President of the Republic. The building occupies a space of 40,000 square meters. It is two stories high and contains sleeping accommodations for 3,200. The sanitary arrangements are as near perfection as science can make them, with a multiplicity of baths and ample lavatory accommodations. A new and useful feature in connection with the hotel will be that various railway companies will each have an office in the

building, so that immigrants proceeding to any part of the Republic will be able to purchase their tickets directly, and be afforded every facility to reach their destination in safety.

### BANK OF THE REPUBLIC.

In 1910 the profits of the Bank of the Republic, located at Buenos Aires, Argentina, were 1,041,178.59 pesos, or the largest gain enjoyed by the institution since its establishment. Part of the profits of this flourishing bank were credited to the reserve fund, part to free shares, and the remainder to the state.

### A PRODUCTIVE VINEYARD.

The province of Mendoza, in the Argentine Republic, has long been celebrated for the abundance, quality, and productiveness of its vintage. Grape culture throughout that province has increased during the last few years by leaps and bounds. Recently Mr. Luis Tomba's vineyard, near the city of Mendoza, consisting of 315 hectares of land, produced a crop of grapes which was sold for 115,000 pesos ($50,600), or at the rate of about $160 per hectare.

### ENTRANCE AND CLEARANCE OF VESSELS AT BUENOS AIRES IN 1910.

In 1910 foreign steamships to the number of 819, carrying 1,766,809 tons, entered the port of Buenos Aires. During the same period 792 steamships, with 1,685,347 tons, cleared from that port. In the coastwise trade of the same port for 1910, steamships to the number of 1,046, carrying 397,020 tons, entered, and 1,036 steamships, with 387,022 tons, cleared. The total tonnage entered and cleared at Buenos Aires during the year referred to was, respectively, 2,289,362 and 2,185,207.

### DECREASE IN DUTIES ON SUGAR.

The Argentine Government has issued a decree providing that from January 7 to April 15, 1911, imported sugar shall be subject to the following specific duties: Refined sugar, of a polarity of 96° or over, $0.07 gold per kilo; unrefined sugar, of a polarity of less than 96°, $0.045 gold per kilo. In normal times the duty on these two classifications of sugar is $0.09, and $0.06 gold per kilo, respectively.

### NATIONAL COMMERCIAL CONGRESS.

On June 6, 1911, there will be held at Rosario, Province of Santa Fe, Argentine Republic, a National Commercial Congress, divided into sections which will consider the following subjects: bankruptcy, transportation, industry, protective boards, and credits. The board of directors of this congress is composed of members of commercial and industrial organizations, and of representative men from places where there are no such organizations but who have been designated

by manufacturers and wholesale merchants in conformity with the invitation of the organizing committee of this congress.

### EXPLOITATION OF FIBROUS PLANTS.

The Government of the State of Corrientes has authorized Mr. Ramon A. Billinghurst to utilize, gratis, and free from State and municipal taxes for a period of twenty-five years, the fibrous plants found in great quantities on the islands of the Parana River and along the boundaries of the Province of Corrientes. The factory where this important industry will be carried on is located at Camp Carlos in Puerto Galvan, 15 kilometers north of Corrientes. It is already equipped with machinery and the buildings are nearly completed. The fibrous plant which will be exploited most extensively is called "caraguatá," and is a species of wild thistle of prolific propagation, which attains, at times, a height of 2.20 meters. "Ibera," a strong and fine fiber, much used in the manufacture of gunny or jute sacks, will also be utilized.

### AVIATION MEET.

A great flying competition is being arranged by "La Nacion," of Buenos Aires, in which all the aviators at present in the Argentine Republic will take part. A prize will be given to the aviator making the best time between Buenos Aires and Rosario, two stops being allowed on the way.

### MISCELLANEOUS CONSULAR NOTES.

According to the Argentine Consul-General at Christiania, arrangements have been made for a line of direct steamers between Norway and Argentina, to make monthly trips and carry chiefly fish products which have hitherto been shipped to Argentina by way of Hamburg.

The new law courts, the construction of which was authorized at an estimate of $1,598,400 (U. S. currency), are nearing completion. The cost, however, amounted to $5,604,720.

Two new sections in the division of "Ganaderia," Department of Agriculture, will be created. One of them will have charge of all matters relating to the dairying industry and the transportation of milk, and the other will have supervision over the preparation and exportation of frozen and chilled meat.

The new port at Santa Fe has been opened to traffic.

The Director of Rural Statistics, Department of Agriculture, estimates the exportable surplus of linseed to be 800,000 tons for the present season.

Miss Juana Durañoña has donated 160 acres of land in the Department of 25 de Mayo on condition that a practical school of agriculture be established thereon. The Government has accepted the donation and will establish a model school there.

## THE RAILROADS IN 1910.

The Director General of Railways of the Argentine Republic has published an advance statement of the railroad movement in 1910 The figures therein contained are really remarkable, the main feature being the large increase in the system during the year. In 1910 there were opened to traffic 3,445 kilometers, which is the largest figure ever recorded in the country. In 1909 the number of kilometers completed was 1,707.

The passenger traffic showed an increase of 9,000,000 passengers.

The combined capital of all the railroads increased nearly 100,000,000 pesos gold, making an aggregate capital of nearly 1,000,000,000 pesos gold.

The total net earnings amounted to 43,527,000 pesos gold, the gross revenues totaling 107,274,000 pesos gold, and the expenses 63,747,000 pesos gold.

The following list shows the number of kilometers in operation on December 31, 1910, and the recognized capital of each railroad:

| Railroads. | Length in kilometers. | Recognized capital in pesos gold. |
|---|---|---|
| NARROW GAUGE. | | |
| Central Northern (national line) | 2,334 | 63,200,000 |
| Argentine Northern (national line) | 1,347 | 44,100,000 |
| Province of Santa Fe | 1,752 | 37,439,000 |
| Compañia General in Buenos Aires Province | 972 | 44,500,000 |
| Central Cordoba, northern section and N. W. A | 1,119 | 31,300,000 |
| Central Cordoba, eastern section | 209 | 7,862,000 |
| Cordoba and Rosario | 291 | 14,000,000 |
| Central Cordoba, Buenos Aires extension | 300 | 8,400,000 |
| Buenos Aires and Pacific, Argentine transandean section | 178 | 7,410,000 |
| Midland of Buenos Aires, provincial concession | 146 | ..... |
| Chubut Central | 86 | 490,000 |
| Rafaela Great Railway | 86 | 462,000 |
| La Plata-Meridian V, of the Buenos Aires Government | 100 | ..... |
| Total | 8,920 | 259,163,000 |
| MEDIUM GAUGE. | | |
| Argentine Northeastern | 1,000 | 29,200,000 |
| Entre Rios | 1,029 | 28,442,000 |
| Buenos Aires Central | 269 | 7,424,000 |
| Total | 2,298 | 65,066,000 |
| BROAD GAUGE. | | |
| Buenos Aires Great Southern | 5,019 | 209,000,000 |
| Buenos Aires Western | 2,349 | 98,980,000 |
| Central Argentine | 4,214 | 165,960,000 |
| Buenos Aires and Pacific | 2,394 | 92,954,000 |
| Buenos Aires and Pacific, B. B. and northeastern section | 1,159 | 37,446,000 |
| Buenos Aires and Pacific, Argentine Great Western section | 1,200 | 52,780,000 |
| Rosario-Puerto Belgrano | 793 | ..... |
| Patagonian lines (national) | 290 | ..... |
| Total | 17,418 | 657,120,000 |
| Total national railways | 3,971 | 107,300,000 |
| Total private railways | 24,665 | 874,049,000 |
| Grand total | 28,636 | 981,349,000 |
| Total in 1909 | 25,508 | 898,913,000 |

## RAILROAD NOTES.

### PORT OF SAN BLAS TO PATAGONIA AND CHOELE-CHOEL RAILROAD.

Work on the port of San Blas to Patagonia and Choele-Choel Railroad, which is being built by a French syndicate, was commenced during the latter part of last January. It is confidently believed that the development of this line will prove very profitable, inasmuch as it will open up one of the best agricultural sections of the Republic.

### BRANCH OF THE ESPERANZA TO GUADALES RAILROAD.

The Buenos Aires to Pacific Railroad has opened to public service the railway line from Buena Esperanza to Guadales, a distance of 260 kilometers.

### BRANCH OF THE YUTO TO PICHANAL RAILROAD.

The section from Yuto to Pichanal of the Ledesma to Embarcacion Railway, has been opened to public service.

### DEAN FUNES TO LAGUNA PAIVA RAILROAD.

The first 150 kilometers of the railway from Dean Funes to Laguna Paiva, counting from the first station mentioned, have been opened to public service.

### INDUSTRIAL BRANCH.

The plans submitted by the Southern Railway for the construction of an industrial branch to the Tandil quarries have been approved by the Argentine Government.

### BRANCH RAILROAD FROM OLAVARRIA TO VELA.

The plans, details and descriptive report, submitted by the Southern Railway, covering the northern section of the branch which it will build from Olavarria to Vela, have been approved by the Federal Government.

### EXTENSION OF TRAMWAY CONCESSION TO EL TIGRE.

In 1905 the municipality of Buenos Aires granted a concession for the construction of a tramway to start from the Plaza de Mayo, in the center of the metropolis of the Republic, and run to the limits of the municipality. From this point it was to be extended, under a Federal concession, to the town of El Tigre. The entire line was to be open to public traffic within a period of five years. The concessionaires, not having been able to fully comply with the terms of the concession in regard to the time in which the line was to be completed,

have requested and secured an extension of two years within which to complete the work. The islands of El Tigre are among the mots beautiful places in the vicinity of Buenos Aires, and are a favorite popular resort for the inhabitants of the capital of the Republic.

### BRANCH RAILWAY FROM CORRAL CHICO TO MAQUINCHAO.

The President of the Argentine Republic has approved the report made on the construction of the section of the branch line of the San Antonio Railway comprised between Corral Chico and Maquinchao. The total cost of this branch is estimated at $3,799,050.

## BOLIVIA

### EXTRA SESSION OF CONGRESS.

At the close of the regular session of the Bolivian Congress early in January of the present year there still remained pending a number of important matters. The President of the Republic, therefore, by virtue of powers vested in him by the Constitution, called an extra session to meet immediately after the closing of the ordinary session. At that time the following questions were discussed: The Chilean protocol concerning railway guaranties; treaty of commerce and navigation with Brazil; extradition treaty with Chile; national and departmental budgets; tax on the sale of mines and rubber forests; authorization to issue bank shares to bearer; authorization for the loan of 100,000 bolivianos ($40,000) for the repair of jails, judicial offices, and the furnishing of same; formation of lists for the appointment of directors for the Bank of the Bolivian Nation; additional credit for extraordinary expenses; taxes on inheritances, and, lastly, military promotions.

### NEW BANK OF ISSUE.

On January 7, 1911, a law was promulgated by the Government of Bolivia authorizing the establishment at La Paz, the capital of the Republic, of a bank of issue, loans, and discounts, under the name of the "Banco de la Nación Boliviana" (Bank of the Bolivian Nation). The bank is to commence operations with a capital of £2,000,000, or 25,000,000 bolivianos, divided into 200,000 shares of £10 each. The Government of Bolivia will invest £1,000,000 in the enterprise, and the remaining 100,000 shares is to be offered in whole or in part to the public and the banks of issue now in existence. Business will

be started with the £1,000,000 contributed by the Government, plus the amount obtained from the sale of shares to the public, even though the full amount of its capital is not entirely paid in, provided, however, that at least 10,000 shares of the stock intended for the public have been subscribed and paid for.

The Bank of the Bolivian Nation shall have the right to issue bank notes in the same proportion and form as is permitted to banks now in existence, but shall have on hand, in gold, 40 per cent of the amount of its bank notes in circulation.

The other banks of issue in the Republic shall, within a period of four years, also raise their proportion of gold deposits to 40 per cent of the amount of their bank notes in circulation, increasing their present deposits at the rate of 2½ per cent per annum until this proportion is reached. In the future, no other bank of issue shall be established in Bolivia, but the present ones shall continue transacting business in accordance with the banking laws of the country. The Bank of the Bolivian Nation shall be under the direction of a general administrative board composed of 8 members, and will lend money on real estate and certain mortgages. The receipts and expenses of the Government of Bolivia will pass through the hands of this bank, 5 per cent annually being allowed the Government on its balances and 8 per cent annually charged on its overdrafts. The bank is prohibited from lending more than 10 per cent of its paid-up capital to the State, more than 2 per cent to a private person, and more than 5 per cent to a corporation or company. No commission will be charged for deposits, remittances, collections, and payments for account of the State.

The National Bank of Bolivia may engage, on its own account and risk, in all business pertaining to banking institutions permitted under the laws of the country governing banks of issue. It is prohibited, however, from loaning money on its own shares, and can only accept the shares of other banks as collateral security or on resale, receiving them in this case up to 50 per cent of their cash value. The bank is further prohibited from acquiring its own shares, or engaging in the loan and discount business when the period of time on which such business becomes due exceeds six months. It shall not discount notes or other commercial paper without securing the signature of at least two responsible persons, nor engage in special transactions reserved to mortgage banks. The property and funds of the bank shall not be hypothecated, nor shall loans be made to mining companies or upon mining shares. It shall not acquire the shares of stock companies nor more real estate than that necessary for the operation of the bank, but may receive shares or property in payment of secured debts the collection of which can not be made in any other manner.

The bank shall have a reserve fund consisting of not less than 10 per cent of its semiannual profits. After this reserve fund has been provided for and the fiscal duties paid, a general meeting of the stockholders shall determine the amount of the dividend to be distributed. The dividends on the 100,000 shares belonging to the State shall be used exclusively for the payment of the loan contracted for the purpose of founding this bank. The bank agrees to establish branches in all the capitals of the Departments, and in such other places as its board of directors may deem desirable. The directors who authorize transactions prohibited by the law governing this bank are individually and jointly liable therefor, and are subject to criminal prosecution for breach of trust. The by-laws of the bank will be formulated at the first meeting of the stockholders and must meet with the approval of the Government.

### BANK EARNINGS.

During the second half of 1910 the earnings of the banks of the Republic of Bolivia were as follows:

| | Bolivianos.[a] |
|---|---|
| Francisco Argadoña Bank | 190,529.48 |
| National Bank | 516,611.66 |
| Industrial Bank | 155,051.99 |
| Mercantile Bank | 61,835.45 |
| Bank of Bolivia and London | 39,587.40 |

### CUSTOMS RECEIPTS AT GUAQUI IN 1910.

The customs receipts collected through the customhouse at Guaqui, Bolivia, in 1910, amounted to 2,090,880.30 bolivianos ($836,352.12), the principal items of which were as follows:

| | Bolivianos.[a] |
|---|---|
| Import duties | 1,651,102.21 |
| Storage | 98,072.13 |
| Parcels post | 37,963.16 |
| Exports of rubber | 166,104.24 |
| Exports of tin | 44,092.51 |
| Exports of copper | 39.069.14 |
| Miscellaneous | 54 476.91 |

### CONVERSION OF SUBSIDIARY COIN.

The Government of Bolivia has contracted with the banking institutions of the Republic for the loan of 2,431,000 bolivianos (about $972,400) for the conversion of the small coin now in circulation, and to enable the authorities to use sealed gold in Government contracts. The banks will act as the agents of the Government in effecting the conversion, and in furthering the use of sealed gold in Government contracts.

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[a] The boliviano has an approximate value of $0.40 United States currency.

## PRODUCTION OF TIN FIRST NINE MONTHS, 1910.

The production of the tin mines of Bolivia for the nine months from January to September, 1910, was 28,598,570 kilos, a considerable increase over the production for the same period of 1909:

## EXPORTS FROM NEW YORK TO BOLIVIA, JANUARY, 1911.

Through the courtesy of the Bolivian Minister at Washington, the BULLETIN is enabled to publish the following table showing the exports from New York to Bolivia for the month of January, 1911:

| | |
|---|---|
| Cotton goods | $28,382.46 |
| Foodstuffs and beverages | 2,812.00 |
| Hardware | 6,440.03 |
| Flour | 1,841.00 |
| Kerosene | 1,601.75 |
| Lumber | 681.50 |
| Machinery | 5,277.70 |
| Railroad supplies | 565.00 |
| Powder and ammunition | 13,336.00 |
| Miscellaneous | 50,360.41 |
| Total | 111,297.85 |

## EXPORT TAX ON RUBBER.

The Government of Bolivia, through its department of customs, has fixed the export tax and valuation of rubber exported from the Republic, as follows: Fine rubber, valuation 5 bolivianos ($2) per kilo; export tax at the rate of 8 per cent on this valuation, 0.4 of a boliviano ($0.16) per kilo; caoutchouc and sernamby, valuation 2.75 bolivianos ($1.10) per kilo; export tax at rate of 8 per cent on this valuation, 0.22 bolivianos ($0.088) per kilo.

## POPULATION OF POTOSI.

According to the census taken by the municipal authorities of the city of Potosi, on November 10, 1910, the population of that thriving and progressive city is 25,000.

## BREWING INDUSTRY.

Large breweries are now in operation in the cities of La Paz and Cochabamba, and a considerable amount of Bolivian capital has been invested in this growing industry. Recently a bill was under consideration in the House of Deputies of the Bolivian Congress to reduce the duty on importations of foreign beer; but on investigation it was found that the beer brewed in the country was of such exquisite flavor and quality as to merit a continuation of the protective duty it had hitherto enjoyed, and the measure was defeated.

### PROPOSED PROMENADE FROM COCHABAMBA TO QUILLACOLLO.

Steps have been taken for the construction of a promenade or avenue, 20 meters wide, between the towns of Cochabamba and Quillacollo, a distance of 13 kilometers. The street railway which now runs between these two important towns is inadequate to properly care for the considerable and growing traffic.

The town of Quillacollo, situated in one of the most beautiful and fertile regions of the Republic, is justly celebrated for its healthful and salubrious climate, as well as its picturesqueness. It has an abundant water supply which descends from the mountain streams of the snow-capped cordillera of Tunari into its rich and fertile valley, so well adapted to the raising of stock and cultivation of vegetables.

The railway from Oruro to Cochabamba, now in course of construction, will pass through the Province of Quillacollo, so that this section should soon experience an extended period of agricultural and mining development.

### MINING ACTIVITY AT ORURO.

Recent reports concerning the ancient mine at Oruro called the "Socavon de la Virgen" (Tunnel of the Virgin), which for some time has been unproductive, indicate that this mine is now entering upon a period of great prosperity. The profits for the last six months amounted to about $40,000, and the indications are that the production in the future will be even greater than it has been in the past. The rich mining district of Oruro, the surface of which has as yet scarcely been exploited, is one of the most promising mining fields in Bolivia for profitable development.

### TRANSPORTATION SERVICE BETWEEN POTOSI AND RIO MULATOS.

The Department of Public Works of Bolivia has ordered that the necessary steps be taken for the improvement of the stage service between Potosi and the Mulatos River. This should stimulate travel between the two places mentioned, and tend to encourage the development of this rich mining and agricultural district.

### NEW TRAMWAY.

The Bolivian Rubber Company and the Bolivian Railway Company are said to be planning a tramway which will start from Parque Pando, in the city of La Paz, traverse Murillo Street, and terminate in Munaipata, the site of the station of the Arica La Paz Railway. This tramway is greatly needed in order to facilitate the cheap and rapid handling of the ever-increasing traffic of the capital, and to render easy of access a growing and populous section of the Bolivian metropolis.

# BRAZIL

### INSIGNIA OF OFFICE OF PRESIDENT.

The National Congress has created a special badge of office for the President of Brazil, which shall consist of a band of ribbon in the national colors, having embroidered on it in gold the escutcheon of Brazil. The ribbon will be about six inches wide, each end terminating in gold fringe. Suspended from the point where the two ends meet is a gold medal showing on the one side a representation of the Brazilian escutcheon, and bearing the obverse side the inscription *"Presidencia da Republica do Brazil."*

### ARBITRATION TREATY WITH URUGUAY.

An arbitration treaty between Brazil and Uruguay was signed at Petropolis on January 12, 1911, the two countries being represented by the Minister of Foreign Affairs of Brazil, Baron Rio Branco, and General Rufino Dominguez, Minister Plenipotentiary of Uruguay accredited to Brazil. This makes the twenty-eighth arbitration treaty which Brazil has signed within the past few years.

### RATIFICATION OF PARCELS-POST CONVENTION.

The National Congress approved on December 31, 1910, the parcels-post conventions recently concluded with France, United States, Germany, and Italy.

### APPROVAL OF ARBITRATION TREATIES.

The Brazilian Government approved on December 31, 1910, arbitration treaties and conventions concluded during 1909, with Bolivia, United States, Portugal, France, Spain, Mexico, Honduras, Venezuela, Panama, Ecuador, Costa Rica, Cuba, Great Britain, Nicaragua, Norway, China, San Salvador, Peru, Colombia, Austria-Hungary, Russia, Haiti, and the Dominican Republic.

### APPROVAL OF TREATY OF COMMERCE AND NAVIGATION WITH BOLIVIA.

The treaty of commerce and navigation, concluded between Brazil and Bolivia on August 12, 1910, was recently approved by the Brazilian Government.

### APPROVAL OF TRADE-MARK CONVENTION.

The Brazilian Government approved, on December 31, 1910, the convention adopted at the Third Pan American Conference, relating to patents of inventions, drawings, and industrial models, trade-marks and literary and artistic property.

### APPROVAL OF CONVENTIONS ADOPTED BY THE SECOND HAGUE PEACE CONFERENCE.

The Brazilian Government approved on December 31, 1910, the following conventions of the Second Peace Conference of The Hague: Convention relative to the opening of hostilities; convention respecting the laws and customs of war on land; convention respecting the rights and duties of neutral powers and persons in case of war on land; convention relative to the status of merchant ships at the outbreak of hostilities; convention relative to the conversion of merchant ships into warships; convention relating to the laying of automatic submarine contact mines; convention respecting bombardment by naval forces in time of war; convention for the adaptation to naval war of the principles of the Geneva Convention; convention relative to certain restrictions with regard to the exercise of the right of capture in naval war; convention concerning the rights and duties of neutral powers in naval war; and convention for the pacific settlement of international disputes.

### RETIREMENT OF DIPLOMATIC AGENTS.

The Brazilian Congress passed on December 20 last a law, becoming effective immediately, providing for the retirement with pay of all diplomatic officers. Ministers who have been in the service 20 years are to be retired on an annual salary of 24,000 *milreis* ($7,920). Those who have had more than 15 years of service and less than 20 are entitled to an annual pension of 12,000 *milreis* ($3,960).

### CHANGES IN THE DIPLOMATIC REGULATIONS.

By virtue of a recent law Brazilian ministers or envoys accredited to South American countries, Mexico, Panama, the West Indies, and Asia are entitled, after the first two years of residence, to an additional salary of 2,000 *milreis* ($660) per annum and after a five-year residence to an additional 4,000 *milreis*. Ministers of the legations at Bolivia, Ecuador, and Colombia will receive an additional 4,000 *milreis* at the end of the first two years and 5,000 *milreis* at the end of the first five years.

### REORGANIZATION OF NAVY DEPARTMENT.

A legislative decree of January 4, 1911, authorizes the President of the Republic to divide the coast of Brazil into departments or prefectures, for administrative purposes, and to reorganize the Navy Department, creating or suppressing bureaus and offices which he may consider necessary for the good of the service.

## APPROPRIATION FOR ENTERTAINMENT OF GUESTS OF FOREIGN COUNTRIES.

The National Congress has approved a bill authorizing an appropriation of 100,000 *milreis* ($33,000) for the reception and entertainment of representatives of foreign governments and distinguished persons visiting Brazil.

## DECLARED EXPORTS FROM RIO DE JANEIRO TO THE UNITED STATES IN 1910.

An interesting report from the Vice-Consul-General at Rio de Janeiro shows that the declared value of exports from the port of Rio de Janeiro to the United States in 1910 surpassed, by a slight margin, the values of the preceding year. The declared exports, by items, were as follows:

| | |
|---|---|
| Coffee | $14,419,634 |
| Diamonds | 1,859 |
| Herva maté | 341 |
| Household goods | 737 |
| Manganese ore | 515,124 |
| Monazite sand | 177,146 |
| Oranges | 251 |
| Orchids | 526 |
| Palm seeds | 621 |
| Pineapples | 910 |
| Plants | 2,409 |
| Rosewood lumber | 15,834 |
| Semiprecious stones | 167 |

## WORKINGMEN'S HOUSES IN RIO DE JANEIRO.

Recently enacted legislation favoring the construction and maintenance of cheaper homes for workingmen in Rio de Janeiro has been promulgated by the Executive, according to advices from J. J. Slechta, Vice-Consul-General at Rio. The principal features of the new law are exemption from payment of import duties on material for use in construction; authorization to the municipal government to exempt contractors from the payment of municipal taxes for a period of fifteen years; a specified percentage earning to determine the rental to be collected from tenants; the granting of available land of the Federal Government not necessary for other purposes, to be used for building sites; and authorization to the Executive to loan building companies funds from the National Savings Institution for the purposes cited.

### INCREASE IN EXCHANGE RATE OF THE CONVERSION OFFICE.

By a decree of the National Congress, approved December 31, 1910, the exchange rate of the Conversion Office has been increased to 16d. per *milreis*. The value of notes issued at the exchange rate of 15d. per *milreis* shall, from the date of the present law, be appraised at the rate of 16d. The Government shall deposit in the Conversion Office, within five years, the difference in value resulting from the increased rate. Under the terms of the decree the Conversion Office shall cease issuing notes when the total in circulation, appraised at the rate of 16d. per *milreis*, shall reach 900,000,000 *milreis*, and the equivalent gold deposit shall amount to £60,000,000. Whenever withdrawals of gold take place, the office may receive new deposits and issue notes against same.

The guaranty and redemption funds, instituted under law No. 581 of June 20, 1899, are restored. The values to the credit of the guaranty fund shall continue to be applied as stipulated in said law. The values to the credit of the redemption fund shall, whenever the Government sees fit, be converted into gold and deposited in the Conversion Office, for which convertible notes shall be substituted and applied to the redemption of the paper money.

### NEW STEAMSHIP SERVICE FOR BRAZIL.

Mr. Sidney Story, vice president of "The Mississippi Valley and South American Steamship Company," of New Orleans, is now at Rio de Janeiro making arrangements for the establishment of a direct line of steamers between New Orleans and Rio de Janeiro. The company propose to make the trip in twelve days.

### CONTRACT FOR FISHING VESSELS.

The "National Fishing Company," of Brazil, has purchased from European shipbuilders, four trawlers, having a speed of 10 miles per hour, and provided with cold-storage compartments and modern equipment.

A Pernambuco firm has placed with the Brihl shipyards, Denmark, an order for a completely equipped trawlboat, a motor boat, and sail boat, at a total cost of £5,000.

### PLANTS FOR THE MANUFACTURE OF PAPER.

In a recent issue of "La Nature," of Paris, attention is called to the large number of plants found in Brazil which could be used in the manufacture of paper. Along the Brazilian coast north of Rio de Janeiro flourish a number of plants which contain a large percentage of cellulose. The plant known as *lirio do valle* grows here in great abundance and yields a fiber containing 50 per cent of pure cellulose.

The marshes are covered with a great variety of plants which could be profitably used in the manufacture of paper, such as the *tabúa*, *peri-peri*, and *gravatá* (wild pineapple). The leaves of the latter plant frequently contain fibers 2 meters in length. In the vicinity of the port of Victoria, State of Espirito Santo, are vast areas covered with this plant. In addition to these, there are many other grasses and plants capable of furnishing an unlimited quantity of raw material. The National Association of Agriculture is making special efforts to develop this industry.

### SPECIAL INDUCEMENTS FOR THE ESTABLISHMENT OF IRON FOUNDRIES.

For the purpose of promoting the establishment and development of the metallurgical industry in Brazil, the national legislature passed a law on January 11, 1911, authorizing the President to give preference to national products in contracting for governmental supplies, to extend to companies engaging in the metallurgical industry the same privileges as those enjoyed by mining companies, and to grant preferential rates to all raw material and finished products which are carried over the Federal lines. The President is authorized to make improvements in the roadbed and equipment of the Central Railway, so as to furnish better facilities for the shipment of iron ores, and to enter into contracts for the construction and lease of railways tending to foster the establishment of iron foundries and the exportation of iron ore.

### CONCESSION FOR THE ERECTION OF IRON MILLS.

By the decree of December 7, 1910, Messrs. Carlos G. da Costa Wigg and Trajano Saboia Viriato de Medeiros, or the company which they may hereafter organize, have been granted permission to establish iron and steel works in Brazil and to export iron ore, and thereby entitled to the special privileges which the Government is offering for the promotion of this industry. The concessioners will erect iron furnaces at Miguel Burnier, or at some other point along the Brazilian Central Railway, having an annual capacity of 24,000 tons of pig iron, together with the mills required for its conversion into sheet iron and steel. The ore and finished products of the mills will be carried over the lines of the Brazilian Central at special freight rates. The time stipulated for the erection of the furnaces is two years and for the entire plant three years.

One of the clauses of the decree provides that in case the concessioners obtain from the Brazilian Congress a subsidy, for which a bill is now pending, and are guaranteed the annual consumption of a certain amount of steel rails they must build a large iron mill with a capacity of 150,000 tons of pig iron and also be permitted to export 1,500,000 tons of ore annually.

### AUTOMOBILE ROAD BETWEEN RIO DE JANEIRO AND PETROPOLIS.

The Department of Communications and Public Works has appointed a commission of engineers to make the preliminary surveys for an automobile road between Rio de Janeiro and Petropolis.

### STUDY OF INDIAN TRIBES.

Mr. SAVAGE LANDOR, the English explorer and scientist, who is making an exploration trip to the interior of Matto Grosso, has been commissioned by the Department of Agriculture to make a special study of the Indian tribes of that region, their language and customs, embodying the result of his investigations in a special report to that Department. The Department has placed at his disposal for this purpose the sum of 30,000 *milreis* ($9,900).

### MISCELLANEOUS NOTES.

Mr. SIDNEY STORY, Vice President of "The Mississippi Valley and South American Steamship Company," of New Orleans, is now at Rio de Janeiro making arrangements for the establishment of a direct line of steamers between New Orleans and Rio de Janeiro. The company proposes to make the trip in 12 days.

Gen. EMYGDIO DANTAS BARRETO has recently been elected a member of the Brazilian Academy of Letters, to take the place left vacant by the death of JOAQUIM NABUCO, late Brazilian Ambassador at Washington.

### PLAN FOR THE BEAUTIFICATION OF THE CITY OF SAO PAULO.

A group of capitalists of the city of Sao Paulo have presented to the State legislature a plan for the improvement and beautification of that city. This, if carried out, will make it one of the most beautiful cities of South America. The plan includes the widening of the leading avenues, the opening up of new ones, the establishment of a system of parks, the construction of public buildings, and the enlargement and extension of light, water, and sewerage systems.

### EXTENSIVE IMPROVEMENTS AT PERNAMBUCO.

The United States consul at Pernambuco, P. MERRILL GRIFFITH, reports that the most important municipal improvement which has been undertaken in that city in many years is now under way. The government proposes to build a new water front, construct a new park, improve many streets, and build a wide avenue from the section along the water front known as the "Lingueta" in the old town of Recife direct to the first large bridge across the Capibaribe River, at the foot of Marquez de Olinda Street, a distance of about one-half of a mile.

### FIRST CONGRESS OF MUTUAL BENEFIT ASSOCIATIONS OF SOUTH AMERICA.

The First Congress of South American Mutual Benefit Associations met at Rio de Janeiro on March 15, 1911. All mutual benefit, life, and accident associations, as well as various cooperative organizations, participated in the proceedings. A number of the Latin American countries were represented at the Congress.

### PROJECT FOR A SUBWAY AT RIO DE JANEIRO.

A group of Brazilian engineers have petitioned the municipal government of Rio de Janeiro for a concession to build and operate an electric tram subway, connecting the center of the city with the suburbs, similar to those of New York, London, and Paris.

### SUBSIDIES FOR COLONIAL RAILWAYS.

The President of the Republic issued on January 25, 1911, the regulations governing the granting of subsidies to colonial railways, as authorized by the law of April 19, 1907. In order to receive the subsidy the proposed lines must connect colonial districts with existing railways, maritime or river ports, and market centers. Colonial railways of 1-meter gauge which do not exceed 60 kilometers in length are entitled to a subsidy of 15,000 *milreis* ($4,950) per kilometer, and those of less than 1-meter gauge to a subsidy of 6,000 *milreis* per kilometer.

## CHILE

### NEW CABINET.

President Barros Luco, of Chile, has reorganized his cabinet in the following manner:

Minister of the Interior, Señor Rafael Orrego.

Minister of Foreign Affairs, Worship, and Colonization, Señor Enrique Rodríguez.

Minister of Justice and Public Instruction, Señor Anibal Letelier.

Minister of Finance, Señor Roberto Sanchez.

Minister of War and Navy, Señor Ramón Leon Luco.

Minister of Industry and Public Works, Señor Javier Gandarillas.

## BUDGET FOR 1911.

The budget of the Chilean Government for the year 1911 amounts to $241,744,443 pesos paper ($48,348,888 United States currency), and $63,124,573 pesos gold of the value of 18d. ($23,040,469 United States currency). The budget in detail in Chilean currency and gold is as follows: [a]

| | Chilean currency.[a] | Chilean gold. |
|---|---|---|
| Department of Interior | 40,987,142.25 | 4,368,075.97 |
| Department of Foreign Relations, Worship, and Colonization: | | |
| Section of Foreign Relations | 667,786.66 | 1,362,297.66 |
| Section of Worship | 2,097,086.00 | ..... |
| Section of Colonization | 2,123,900.00 | ..... |
| Department of Justice | 8,691,169.63 | ..... |
| Department of Public Instruction | 32,144,164.40 | 531,989.65 |
| Department of Finance | 15,957,579.45 | 25,030,449.96 |
| Department of War | 29,249,162.75 | 677,181.66 |
| Department of Marine | 14,098,196.67 | 12,864,893.80 |
| Department of Industry and Public Works | 95,728,255.48 | 18,289,684.32 |
| Total | 241,744,443.29 | 63,124,573.02 |

## CHILEAN LOAN.

During the latter part of January, 1911, the Chilean Government negotiated a loan by an issue of bonds having a par value of £4,905,000. The loan was quickly covered at 94½ per cent of its face value, and purchasers of large quantities of the bonds were only able to obtain about 10 per cent of the amount subscribed. The bonds bear 5 per cent interest, and provide for a 1 per cent amortization fund. The loan was made through the Rothschilds in London.

## THE SUPPLY OF NITRATE.

The last quarterly circular of the Nitrate Propaganda Association of Chile states that the contents of the nitrate fields of northern Chile are estimated as follows, on the basis of the latest investigations:

| | Quintals. |
|---|---|
| Tarapaca | 725,300,000 |
| Toco | 614,925,000 |
| Antofagasta (central district) | 714,184,000 |
| Aguas Blancas | 1,083,032,000 |
| Taltal | 2,087,063,000 |
| Chanaral and Copiapo | 183,700,000 |
| Total | 5,408,204,000 |

This represents 245,827,000 tons, sufficient to supply the world's requirements for over fifty years.

[a] Chilean currency refers to the paper peso, valued at about 21 cents; the gold peso equals $0.365.

## COAL IMPORTS AND CONSUMPTION FOR YEARS 1905–1910.

Recent consular advices from Valparaiso, Chile, state that the imports of coal for 1910 amounted to 1,293,140 tons against 1,153,993 tons for 1909. The greater bulk of the importation was divided as follows:

| | |
|---|---|
| Cardiff | 584,753 |
| Australian | 426,861 |
| West Hartley | 277,133 |

The United States exported but a comparatively small amount to Chile, but will probably increase the volume from now on since heavy return cargoes of nitrate are practically assured.

During the five years, 1905–1909, the relative amounts of foreign and native coal consumed in Chile was as follows:

| Year. | Tons (native). | Tons (foreign). | Total. |
|---|---|---|---|
| 1905 | 928,000 | 1,180,000 | 2,108,000 |
| 1906 | 1,119,000 | 1,020,000 | 2,139,000 |
| 1907 | 999,000 | 1,490,000 | 2,489,000 |
| 1908 | 990,000 | 1,644,000 | 2,634,000 |
| 1909 | 924,000 | 1,342,000 | 2,266,000 |
| Total | 4,960,000 | 6,676,000 | 11,636,000 |

At present there is no duty on coal. The average per ton for the foreign coal for the period covered by the above table is estimated at $6.50 United States gold.

## CONSULAR TRADE AND INDUSTRIAL NOTES.

During 1910 stock companies were incorporated with an aggregate capital of $3,597,730.

Spain and Italy furnished the majority of the 2,543 immigrants to Chile during 1910.

The Chilean Government has just let the contract for the erection of 42 country schoolhouses. This should create a demand for school furniture and supplies.

The exports from Chile for the first ten months of 1910 amounted to $82,878,545 United States currency, as against $80,247,390 for 1909.

The Chilean custom receipts for January, 1911, amounted to $3,872,209 United States currency, as against $3,024,782 for the same period of 1910. Of this amount the imports supplied about 45 per cent of the increase.

There is an increasing demand for barbed wire in Chile. Farms are being divided off so as to make the most economic use of all of the

land. The greater portion of the barbed wire now imported comes from Europe and enters free of duty.

The question of getting sufficient ties for the Government railroads from the Chilean forests is becoming a serious matter of late. It is estimated that during 1911 the railroads will require from 75,000 to 100,000 ties.

## PROPOSED ESTABLISHMENT OF SPANISH COMMERCIAL MUSEUM IN VALPARAISO.

A commercial museum of Spanish manufactures, similar to the museums in Brazil, Uruguay, and the Argentine Republic, is to be established in Valparaiso, Chile, under the auspices of the Spanish Commercial Expedition to the Latin American Republics. The bureau in Madrid, Spain, known as "Argos," with which this museum is affiliated, is a commercial center of an official character. It is subsidized by the Spanish Government and receives encouragement and protection from boards of commerce and industry in Spain as well as from Spanish steamships companies. The bureau referred to has for its object the fostering of closer and more extensive trade relations between Spain and the Latin Republics of the Western Hemisphere.

## WHARF CHARGES AT ANTOFAGASTA.

The following tariff has been approved by the Chilean Government for the loading and unloading of vessels at the port of Antofagasta:

| | Chilean gold of the value of 18d. | | Chilean gold of the value of 18d. |
|---|---|---|---|
| Per package of from 1 to 50 kilos | $0.03 | Coal in bulk, per 1,000 kilos | $0.40 |
| Per package of from 51 to 100 kilos | .045 | Demijohns, each | .01 |
| Per package of from 100 to 200 kilos | .06 | Lumber, per 1,000 feet | .40 |
| Per package of from 201 to 500 kilos | .24 | Sugar cane, from Guayquil, per stick | .01 |
| Per package of from 501 to 1,000 kilos | .60 | Oxen, horses, and mules, each | .15 |
| Per package of from 1,001 to 2,000 kilos | 1.80 | Sheep and goats, each | .02 |
| Per package of from 2,001 to 3,000 kilos | 3.60 | Cows, with calves, each | .20 |
| Fire brick, per 100 | .25 | | |

## ARICA TO LA PAZ RAILWAY CONSTRUCTION WORK.

The construction work on the Arica to La Paz Railway is now being pushed forward with great vigor, and it is confidently expected that the entire line will be open to public traffic during the latter part of 1911 or early in 1912.

One of the great difficulties experienced in the building of a mountainous railway like this is the considerable number of tunnels which must be bored. At the present time the Arica to La Paz Railway has seven tunnels in course of excavation. Work is also progressing from the Bolivian as well as from the Chilean end of the line, thus facilitating and expediting the construction. At the beginning of the

present year some 3,000 Chilean and 2,000 Bolivian laborers were employed in grading the line, digging tunnels, excavating cuts, constructing culverts and other masonry work, setting up bridges, providing sufficient water supply in the desert places, and in numerous other duties connected with the construction.

Parts of the Chilean division of the road are extremely difficult to construct. For example, for over a year and a half some 2,000 laborers were employed on a section covering about 30 kilometers on the Chilean side of the cordillera. It was such difficulties that induced the contractors to expedite the work of construction from the Bolivian end, in spite of the additional expense of transporting necessary material via Mollendo, Arequipa, and Lake Titicaca. The result of this move is shown by the fact that there are now, on the Bolivian section, about 150 kilometers of rails already laid, and nearly all the grading completed to the Chilean frontier. Due to heavy grades on the Chilean side about 30 kilometers of the road will be of the cogwheel type.

When this line is completed, it is estimated that the journey from Arica to La Paz will take thirteen hours. The line will traverse the famous Tacora sulphur mines, the largest in the world, and will penetrate the celebrated Corocoro mining district, as well as other rich and productive territory of Bolivia and Chile.

The Government of Chile will operate the Arica to La Paz Railway for fifteen years, after which time the Bolivian section will become the property of the Bolivian Government.

### THE RAILWAYS IN 1910.

A recent number of the "Banking and Railway Review," of Madrid, contains an interesting article on the development of the railway system of Chile. Attention is called to the fact that since 1851, the year in which the first line from Port Caldera to the city of Copiapo was inaugurated, the Chilean railways have grown rapidly in extent until at the present time they comprise a total length of about 6,000 kilometers, as compared with 81 kilometers in the year mentioned. About 3,000 kilometers of the railways referred to belong to the State, and an equal mileage to private parties. The majority of the privately owned railways are in the great nitrate region, where the mineral wealth has encouraged their construction and development. The Government of Chile has limited its railway holdings to the central and thickly populated portion of the nation.

In addition to the foregoing there were under construction in the Republic at the beginning of 1910, 2,893 kilometers of railways, 560 kilometers belonging to private parties, and 2,333 kilometers to the State. There was, furthermore, under consideration at the time mentioned the survey of a new line having an estimated length of 1,030 kilometers.

Moreover, the "longitudinal railway," running from north to south through nearly the entire Republic of Chile, connecting Tacna in the north with Port Montt in the south, is being pushed forward with great rapidity. Its total length will be 3,439 kilometers. That great central artery of transportation, which will soon unite such distant ports of the Republic as those just mentioned, will also be in close communication with 28 transversal railways, many of which have already been constructed,

The following table shows the State railways in operation on January 1, 1910:

| State railways. | Kilometers. | State railways. | Kilometers. |
|---|---|---|---|
| From Chañaral to Chulo, and branches | 236 | From Tongoy to Tomaya | 65 |
| From Huasco to Vallenar | 49 | From Los Vilos to Illapel | 58 |
| From Coquimbo to Serena and Rivadavia and to Ovalde | 235 | From Valparaiso to Puerto Montt | 1,975 |
| | | Total | 2,618 |

Some of the lines of these State railways represent skillful and intelligent surveying, as many of them are regarded as difficult types of railway building. For instance, from Santiago southward the survey of the "longitudinal railway" is comparatively level, since the line passes through the central valley; but, on the other hand, it crosses a series of rapid and torrential rivers, spanned by bridges which are noted for the solidity of their metallic frameworks and the neatness and beauty of their construction. Of this class of work the most remarkable, perhaps on account of its height, length, and splendid appearance, is the Malleco viaduct—the longest of Chilean bridges—measuring 98 meters from the bottom of the ravine to the rails and extending a distance of 1,880 meters over the Bio-Bio River.

At the close of 1910 there were 24 privately owned railways in Chile, constructed under concessions granted by the Federal Government to individuals and companies. The names, gauges, and lengths of these railways are as follows:

| Railways. | Gauge. | Length. | Railways. | Gauge. | Length. |
|---|---|---|---|---|---|
| | *Meters.* | *Kilometers.* | | *Meters.* | *Kilometers.* |
| Arica to Tacna | 1.435 | 62.4 | Concepcion to Talcahuano | 1.436 | 15.19 |
| Nitrate railways from Iquique to Pisagua | 1.435 | 523.1 | Concepcion to Penco | 1.68 | 18.26 |
| Junin to Oficina Carolina | .76 | 89.0 | Coronel to Buen Retiro | 1.68 | 6.0 |
| Caleta Buena to Agua Santa | .76 | 82.0 | Coronel to Boca Maule and Puchoco | .91 | 8.0 |
| Challacollo to Cerro Gordo | .76 | 35.0 | Concepcion to Curanilahue | 1.68 | 103.0 |
| Tocopilla to Toco | .70 | 122.3 | Transandean to Juncal | 1.00 | 70.551 |
| Antofagasta to Bolivia | .76 | 800.72 | Rancagua to Teniente | .762 | 70.0 |
| Caleta Coloso to Aguas Blancas | .76 | 185.97 | General Cruz | 1.00 | 25.0 |
| Taltal to Cachinal | 1.07 | 297.56 | Transandean to Antuco | 1.00 | 71.0 |
| Carrizal to Cerro Blanco | 1.27 | 18.60 | Collilefu to Pirihueico | 1.00 | 30.0 |
| Llano de Maipo | 1.00 | 21.7 | Punta Arenas to Mina Loreto | 1.00 | 8.5 |
| Santiago to San Bernardo | 1.435 | 14.76 | | | |

The State is now laying double tracks on some sections of its lines, it being the desire of the Government to serve the public and facilitate traffic. With this end in view, the Government has requested estimates for the electrification of the steam railway running from Santiago to Valparaiso, as well as for some of its other steam lines. It is also actively engaged in pushing forward the construction of the Arica to La Paz railway. When the whole network of Chilean railways now planned is completed, the Republic of Chile will have one of the most admirable, serviceable, and best constructed railway systems in the world.

# COLOMBIA

### THE BUDGET FOR 1911.

The National Assembly of Colombia has passed the budget bill for the year 1911. The revenues are estimated at $9,779,500 gold, and the expenses at $8,937,688.40 gold. This estimate of revenues is a comparatively low one, as in 1910 nearly $12,000,000 gold were realized from them.

### FERTILIZER FACTORY.

Señor Luis A. Uribe has recently established in Bogota a plant for the manufacture of chemical fertilizers, such as phosphates, ammonia salts, potash, and lime. Señor Uribe will also establish an experimental farm near Chapinero for the practical demonstration of those fertilizers in connection with the cultivation of wheat, coffee, potatoes, etc.

### AGRICULTURAL CONGRESS.

The Society of Farmers of Colombia has issued a call for the holding of an agricultural congress, to be inaugurated on April 16, 1911, at Bogota. One of the main features of the conference will be the discussion of modern methods of farming and their adoption in developing the vast agricultural resources of the country, where the products of both the temperate and tropical zones can be raised successfully.

### GOVERNMENT CONTROL OF TELEGRAPH AND TELEPHONE SYSTEMS.

The contract leasing the telegraph and telephone lines of the Republic to Señor Francisco J. Fernandez having been terminated, the Government of Colombia has reassumed the control and management of these systems. They will, hereafter, be administered by the General Bureau of Posts and Telegraphs, through the Division of Telegraphs, recently created for this purpose.

### NEW TERRITORY.

The Colombian Government has recently created the Territory of Vaupres in the Caqueta region, with the following boundaries: From the Serrania de la Peña, a straight line northward as far as the Guaviare River; along this river as far as the Venezuelan frontier; from the latter southward as far as the Brazilian boundary; along this boundary as far as the Apoporis River; thence up stream as far as the Serrania de la Peña, the starting point. The government of the new territory is intrusted to a special commissioner.

### PACKING HOUSE IN CISPATA.

A company has been organized in Colombia for the establishment, in Cispata, of a packing house and the exportation of frozen meats.

### RUBBER PRODUCTION IN COLOMBIA.

The Pan American Union is in receipt of a most interesting and comprehensive report on the production of rubber in Colombia, prepared by CHARLES H. SMALL, the United States Vice and Deputy Consul-General at Bogota, Colombia. The BULLETIN takes pleasure in publishing this report in full.

As a general proposition, in so far as soil and climatic conditions are concerned, this country offers surpassing opportunities for the growing of rubber. In the hot, damp valleys of the rivers Magdalena, Meta, Atrato, Sinu, Patia, Caqueta, and the smaller streams of the country rubber trees have long grown wild. The "Castilloa" and "Hevea" varieties of rubber are found in the sections alluded to, while "Manihot" has been discovered in a number of places throughout the country, in some instances at as great an altitude as 1,500 meters above sea level. Until quite recently no attention had been given to either the growing or systematic gathering of this product. The natives, in their desire to obtain a maximum quantity of the latex, formerly gathered the rubber in a most primitive and crude manner, oftentimes felling and destroying the trees. However, since the recent world-wide exploitation of the rubber industry was initiated, a policy of conservation has been inaugurated in the Republic, and the National Agricultural Society of Colombia, the headquarters of which are at Bogota, has been giving wide publicity to the wisdom of utilizing modern methods in tapping the trees and to the folly of destroying the plants. The efforts of this society have resulted in a material decrease of the wanton destruction of the trees, and at the present time there are a number of tracts of wild rubber in Colombia being tapped yearly, in a crude manner it is true, but nevertheless in a fashion that does not kill the plant.

Owing to the lack of available statistics on the subject, it is impossible to accurately estimate the area of land now in rubber cultivation. Competent authorities have it that but little has been accomplished in the matter of the planting and growing of this product in a scientific and systematic manner. In consequence, but few plantations have been started, notwithstanding the advantageous resources offered by the soil and the climate of the country. There appear to be two principal primary reasons for the lack of the development of the rubber industry in Colombia. Briefly stated, these reasons are: The general absence of roads throughout the Republic, and the difficulty of obtaining an adequate supply of labor. The best rubber-growing lands are, for the greater part, located in remote sections of the country, far from population centers and difficult of access from the market places. This lack of adequate transportation

facilities has undoubtedly been the greatest factor in retarding the rubber industry. While there is a plentitude of labor in the larger cities and coast towns, conditions in the interior country districts are quite the reverse, and large plantation and "hacienda" owners are annually confronted with the problem of securing a sufficient number of laborers to garner the crops.

It is said that the best rubber lands in Colombia are to be found in the so-called Medina district, which is in the eastern part of the country near the town of Medina. A high quality of black rubber is produced here. It is, moreover, in the center of a more or less populated district and in the vicinity of the navigable rivers of the eastern plateau. Another portion, held in high regard by those interested in the rubber industry, is known as the "Caqueta district," which is located in the southern and eastern part of the Department of Cauca, between the Rivers Caqueta and Putumaya, and of which the towns of Guadalupe and Esperanza are the market centers. In the southern part of the Department of Tolima there are a number of small tracts where cultivated rubber is grown in a desultory sort of fashion, but with no great commercial results. In this so-called "Tolima district," near the town of Chaparral, there is a rubber plantation growing a plant, named after its supposed discoverer—a Mr. THOMPSON, and locally designated as "Thompsonian"—which is grown at an altitude of nearly 2,000 meters above sea level, and is said to possess superior qualities of elasticity and strength. In common with the other varieties of Colombia, the output of "Thompsonian" rubber is small, owing, in all probability, to the primitive methods of cultivation.

In conclusion, it might be stated that, from many standpoints considered, Colombia offers excellent primary advantages for the successful cultivation of the rubber plant. The two principal drawbacks are, as hereinbefore stated, the lack of laborers in the rubber-growing districts and the great difficulties to be encountered in marketing the product. Uncleared forest lands in the heart of the rubber-producing areas may be obtained for as low a sum as from 25 to 50 cents (American gold) per acre.

# COSTA RICA

## CONVERSION OF THE PUBLIC DEBT.

The Government of Costa Rica has entered into a contract with Mr. MINOR COOPER KEITH, of New York, for the conversion of the public debt of the Republic.

In the preamble of the contract the Government makes the following statement of its public debt:

| External debt. | Pounds sterling. | Internal debt. | Colones.[a] |
|---|---|---|---|
| "A" 3 per cent bonds | 525,000.00 | Limon 6 per cent sanitation bonds | 1,013,000 |
| "B" 2½ per cent bonds | 1,475,000.00 | | |
| Certificates representing coupons in arrears | 80,000.00 | | |
| Interest up to December 31, 1910 (nonconsolidated) | 513,093.15 | | |

[a] The colon has a value of $0.465 United States gold.

For the payment of this public debt the Costa Rican Government will issue bonds, known as the "Consolidated gold bonds of 1911," to the par value of £1,621,600, or $7,880,976 United States currency. This issue shall be payable on or before January 1, 1958, by means of an accumulative sinking fund of not less than 1 per cent annually on the total par value of the bonds. The interest will be 4 per cent per annum for the first 10 years and 5 per cent thereafter.

The principal and interest of the bonds, the payment to the sinking fund, and the expenses of the service of the debt are considered as having first lien upon all the export and import customs revenues of the Republic until the entire issue of the bonds shall have been duly canceled. In order to fully guarantee the semiannual payments of interest, sinking fund, and expenses, the Government agrees to pay, in advance, such portion of the customs revenues as may be necessary to cover the total amount due at the end of the six months for which payment is made.

This contract was ratified by the Costa Rican Congress on February 23, 1911, and became operative at once.

## ANDREW CARNEGIE'S GIFT FOR THE NEW CENTRAL AMERICAN PEACE TEMPLE.

According to a report published in a recent number of "El Noticiero," of San Jose, Mr. ANDREW CARNEGIE has authorized the Costa Rican Government to draw on him for the sum of $100,000 for the construction of another Central American Court of Justice, to be erected at San Jose. The first peace temple, at Cartago, also established through the beneficence of Mr. CARNEGIE, was destroyed by the earthquake of 1910.

## NEW SEAT OF THE CENTRAL AMERICAN COURT OF JUSTICE.

In accordance with a convention signed at Guatemala City on January 10, 1911, by the Governments of Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua, and amending the Convention of Washington of 1907, the seat of the Central American Court of Justice has been transferred from Cartago to San Jose, the capital of Costa Rica. The court is, moreover, authorized to hold its sessions elsewhere in Central America whenever it may deem it expedient.

## NEW SUBSIDIARY COINS.

Duly authorized by the President of the Republic, the Treasurer General of Revenues of Costa Rica has placed in circulation 400,000 silver coins, denomination of 10 cents of colon each (about 5 cents United States currency). These were struck at the Philadelphia mint of the United States Government.

### NEW INTEROCEANIC RAILROAD.

The interoceanic railroad between Port Limon, on the Caribbean, to Punta Arenas, on the Pacific, was formally opened to traffic on January 14, 1911.

## CUBA

### CENSUS OF THE REPUBLIC.

The census of Cuba, taken from January 30, 1909, to July 30, 1910, shows the following figures, by provinces:

| | |
|---|---|
| Pinar del Rio | 252,421 |
| Havana | 555,178 |
| Matanzas | 255,308 |
| Santa Clara | 497,142 |
| Camaguey | 128,669 |
| Oriente | 461,394 |
| Total | 2,150,112 |

This total represents an increase of 49,851 inhabitants over January, 1909, when the population of the Republic was 2,100,261.

### PORT IMPROVEMENT BILL.

The Cuban Congress has recently passed an important port improvement bill, by the terms of which the "Compañía de los Puertos de Cuba" is granted a concession to dredge and improve the ports of the Republic. In consideration of these works the concessionaire shall enjoy for the period of thirty years the revenues from the following tonnage fees to be levied at ports of entry: Per ton of merchandise from the United States, 80 cents; per ton of merchandise from other countries, $1; per ton coal, 10 cents. These charges, which take the place of those prescribed by article 175 of the customs ordinance, shall be collected by the custom-houses and placed to the credit of the concessionaire, to whom it shall be turned over weekly without any deduction whatsoever.

### PROPOSED LOAN FOR HAVANA.

The city council of Havana has adopted a resolution to float a loan of $28,000,000. The resolution is in the nature of a petition to the President of the Republic asking his approval of the step. This sum, with the exception of $6,000,000, is to be devoted to public improvements; to refund the present loans amounting to $14,000,000;

to the payment of the floating debt, amounting to $3,700,000; to cover the city's share of the sewer and paving contract now in execution, amounting to $5,000,000; and to pay the $222,667.30 due the State for the Vedado Aqueduct.

### THE NATIONAL BANK OF CUBA IN 1910.

The annual report of the president of the National Bank of Cuba, with headquarters at Havana, shows a wonderful increase in the volume of its business for the year 1910.

According to this report, the bank made collections during the year amounting to $107,000,000, or $2,000,000 weekly. This was an increase of $45,000,000 over 1909. The total volume of exchange handled by the institution for the same period was $250,000,000, or an increase of $80,000,000 over the preceding twelve months.

In its cash transactions at the head office for 1910 the bank registered over $1,000,000,000, or $3,200,000 for every banking day in the year. These last figures show an increase over 1909 of $500,000 a day.

### PROPOSED AQUEDUCT FOR SANTIAGO.

President GOMEZ, of Cuba, has sent a message to the National Congress requesting an appropriation of $2,000,000 to be used in the construction of a new aqueduct for the city of Santiago de Cuba.

### CONSTRUCTION OF GUNBOATS.

The President of Cuba has awarded a contract for the construction of two gunboats of the *Habana* type to the Krajewski-Pesant Company, and two others of the *Matanzas* type to the firm of Viuda de Ruiz Gamiz, at the price of $28,000 each.

### THE ASPHALT DEPOSITS OF THE REPUBLIC.

A recent issue of the London "Financial News" contains an interesting report, stating that, in the opinion of experts, it is believed that the bitumen deposits of Cuba will eventually prove superior to any other in the world. This view has so impressed certain financial interests in London that steps have been taken by them to develop the natural bitumen resources of the island with all due speed. The possibilities of a great industry are already apparent. Oil production on a small scale has been in progress in Cuba for several years past, and there are also small refineries.

The bitumen deposits of Cuba are exceptionally pure and of high quality, and the resilience of the made-up material is exceptional. Such material is, of course, ideal for motor traffic, and it is in this direction that the Cuban deposits of bitumen will most likely be utilized.

# DOMINICAN REPUBLIC

### CONVENTION RATIFIED.

The Dominican Government has ratified the convention signed at the Pan American Conference of Mexico on January 28, 1902, for the exercise of liberal professions.

### THE BUDGET FOR 1910–11.

In the budget bill for 1910–11, recently passed by the Dominican Congress, the revenues are estimated at $4,001,500 gold, the expenses being fixed at the same amount, distributed as follows:

| | |
|---|---|
| Legislative power | $97,008 |
| Executive power | 18,300 |
| Judicial power | 185,892 |
| Interior and police | 531,491 |
| Foreign affairs | 83,424 |
| Finance and commerce | 2,028,224 |
| War and navy | 553,882 |
| Justice and public instruction | 212,359 |
| Agriculture and immigration | 34,440 |
| Promotion and communications | 256,480 |
| Total | 4,001,500 |

### NEW STEAMSHIP SERVICE FOR PUERTO PLATA.

According to a recent report from PHILIP E. HOLLAND, United States Consul at Puerto Plata, the Compañía Trasatlántica de Barcelona, a Spanish steamship company, has begun to operate a line of steamships which will touch hereafter at Puerto Plata. Five steamships will be devoted to this route.

Sailing from Cadiz on the 15th of each month, each ship in turn will touch at the following ports: Genoa, Barcelona, Valencia, Malaga, Cadiz, Palma de Canaria, Santa Cruz Teneriffe, Santa Cruz de la Palma, San Juan Porto Rico, Puerto Plata, Habana, Puerto Limon, and Colon.

The return trip from Colon will begin on the 12th, and touching Savanilla, Puerto Cabello, La Guaira, Curaçao, Ponce, San Juan Porto Rico, Canary Islands, Barcelona, and Cadiz.

On their return to Europe they will leave for New York, Habana, Veracruz, and return touching the same three ports.

### BIDS FOR STREET PAVING IN LA VEGA.

The municipal government of La Vega, Dominican Republic, has resolved to improve the streets of the city by scientific methods. For

this purpose the municipality invites capitalists and companies in the United States to submit proposals for the work, to be done by contract and on condition that the contractor shall furnish the capital therefor. The municipality will pay interest and such annual installments as may be agreed upon until the total amount of the principal shall have been canceled.

Further particulars may be obtained by applying to Senor EMILIO C. JOUBERT, Minister of the Dominican Republic, The Parkwood, Washington, D. C.

# ECUADOR

## SPEYER LOAN.

Early in January, 1911, the Government of Ecuador concluded the negotiation of a loan with the banking house of SPEYER & Co., of New York, for the sum of 3,000,000 sucres (approximately $1,500,000 gold). This is secured by 3,000 treasury certificates valued at 1,000 sucres (about $500) each, bearing 6 per cent interest annually from the date of issue to date of maturity, and redeemable within a period of twelve months. For the interest service and the cancellation of the aforesaid certificates the Government of Ecuador appropriates and sets aside the following revenues: Fifty per cent of the total export duties of the Republic, including all surcharges, collectible on or before June 1, 1911 (after the payment of the GALLARDO loan); 500,000 sucres (about $250,000) of the Federal Government's share of the liquor tax for 1911; and all the customs revenues of the Republic, not subject to outstanding liens, are pledged as a special guaranty in payment of the loan referred to.

The treasury certificates in question were taken by SPEYER & Co. at 85 per cent of their par value, producing a net amount in cash to the Government of Ecuador of 2,550,000 sucres (about $1,275,000). These certificates are receivable at par by the custom-houses of Ecuador in payment of the export duties referred to on or before June 11, 1911. Administrators and custom-house officers are instructed to receive these in lieu of money. If after the expiration of twelve months all the certificates should not have been canceled, the custom-houses shall continue receiving these at par, including principal and accrued interest, in payment of export duties until the complete cancellation of the certificates shall have been effected. These certificates are exempt from all taxes now in force or which may hereafter be levied.

## TERMS OF SANITARY CONVENTION WITH PANAMA.

The sanitary convention, signed adreferendum in Quito on September 26, 1908, by the representatives of the Republics of Panama and Ecuador, and duly promulgated by President ELOY ALFARO on December 16, 1910, is now a binding and effective law of the Republic of Ecuador.

Under the terms of this convention both Governments agree to adopt the most practical and efficacious methods known to science for the prevention of contagious diseases, especially yellow fever, bubonic plague, and smallpox, in the respective ports of the two Republics, and, concerning such diseases, to observe the quarantine provisions of the Sanitary Convention of Washington. Lazarettos for the treatment of epidemics and sanitary stations for the isolation and observation of suspected passengers are provided for in the principal ports of both countries. The convention is for an indefinite period, but may be terminated by either party giving a year's notice in advance of its intention to withdraw from the pact.

## RECENT CONCESSIONS.

The Government of Ecuador has recently granted the following concessions, according to advices from HERMAN R. DIETRICH, United States Consul-General at Guayaquil: To Mr. JUAN FRANCISCO ARCIA Y MORALES, of Guayaquil, Ecuador, for the exclusive right to manufacture iron and metal beds in the Province of Guayas for five years. To Mr. LUIS MAULME, of Guayaquil, Ecuador, for the exclusive right to fish for mother-of-pearl in the territorial seas and rivers of the Provinces of Guayas, Manabi, and Esmeraldas for a period of six years. To Mr. LUIS MAULME, of Guayaquil, Ecuador, for the exclusive right to refine crude petroleum in the Province of Guayas for a period of six years.

## RIOBAMBA WATERWORKS.

Material to the value of $30,000 gold for the construction of waterworks at Riobamba, Ecuador, one of the principal stations of the Guayaquil and Quito Railroad, has been shipped from New York, via the Strait of Magellan, and is expected to arrive in Guayaquil some time during the present month. In addition to this shipment contracts have been made with United States firms for the purchase of tubing and other necessary supplies for use in the construction and installation of the Riobamba waterworks. A representative of the contracting firm in charge of this work recently visited some of the principal manufacturing cities of the United States in order to obtain machinery, material, and supplies with which to complete this important work for the municipality of Riobamba.

### ELECTRIC-LIGHT PLANT AT RIOBAMBA.

The electric-light plant at Riobamba, according to reports of the Ecuadorean press, has been transferred to American capitalists, who contemplate enlarging the installation and greatly improving the electric light and power service of that city. Able and competent electrical engineers will be employed to manage the plant, and a general improvement and betterment is to be effected not only in the completion of the unfinished work, but in the sections of the plant already completed. The best and most appropriate lamps, materials, and supplies required for the equipment of a first-class electric light and power plant will be procured. Riobamba is a rapidly growing and progressive city, and its inhabitants are now availing themselves, to a greater degree than ever before, of the use of electricity in manufacturing and industrial pursuits.

### TRAMWAY CONSTRUCTION IN QUITO.

The Quito Tramway Company has let a contract for the construction of 4 kilometers of electric tramway roadbed in the capital of the Republic. The contractor agrees to do the work of grading, culverting, and the laying of ties and rails over the 4 kilometers of tramway line mentioned, within a period of six months. A large number of laborers are at present engaged in the work, and it is confidently expected that the line will be completed within a period of four months. Sufficient water power is available for the development of electric power necessary to operate the line. This tramway, which promises to be one of the most useful and best paying enterprises of Quito, will ultimately be extended to Pomasqui.

## GUATEMALA

### PROPOSED LOAN.

It is stated that the Guatemalan Government is at present negotiating with American financiers for a loan of $30,000,000. Señor Francisco Sanchez Latour, formerly chargé d'affaires of Guatemala at Washington, will participate actively in the transaction, as the treasurer of the Republic.

In confirmation of the above report, President Estrada Cabrera, announced in his message at the opening of Congress, on March 1, that the arrangements for rehabilitating the country's finances would probably be concluded at an early date.

### THE CENTRAL AMERICAN PRESS ASSOCIATION.

Five of the leading papers of Central America, one from each country, have organized the Central American Press Association. One of the principal aims will be to hold regularly Central American Press Conferences, the first of which will meet some time this year. At that time the entire press of Central America will be invited to join the association. The five papers referred to are: "La República," of San Jose, Costa Rica; "El Diario de Nicaragua," Managua, Nicaragua; "La Prensa," of Tegucigalpa, Honduras; "El Diario del Salvador," of San Salvador; and "El Diario de Centro América," of Guatemala City.

### NEW EXPORT DUTIES.

A decree of the President of Guatemala establishes the following export duties: On each pound of chicle exported from the Department of Peten, 2 cents gold; exports of rubber, 1½ cents gold; mahogany, cedar, and other precious lumber exported from the same department, $1 gold per 1,000 feet.

### NEW RIVER PORT.

By virtue of a presidential decree, a river port to be named "San Joaquin," in the Department of Huehuetenango, Guatemala, will soon be opened. It is located on the left shore of the San Ramon River and near the mouth of the Pequeño Chancolin River.

## HAITI

### VISIT OF AMERICAN TOURISTS ON BOARD THE "NEW YORK" TO PORT AU PRINCE.

Port au Prince should be congratulated on the elaborate preparations which it made to receive the American tourists who are cruising the West Indies on board the *New York* and who were scheduled to stop for a day at this port. Unfortunately, the steamer was delayed by heavy seas after leaving Kingston, and as a result the trips into the country, and especially to the Etang, had to be omitted. The visitors, however, inspected the city through the generosity of the inhabitants, who placed carriages and busses at their disposal. A visit was made to the National Palace, where, in the absence of President SIMON, the tourists were cordially received by the President of the Senate, Senator PAULIN. He made a pleasing address of welcome in the English language, which the local press referred to as given

"in the tongue of ROOSEVELT." He expressed the regret which President SIMON would feel at not being present, and also alluded to the plans of his Government and the MACDONALD concessions. Col. WILLIAM HESTEL, proprietor and director of the "Brooklyn Eagle," responded to the welcome. Refreshments were served to the tourists, who showed their friendliness by drinking toasts to President SIMON and Senator PAULIN, and by cheering them. "Le Matin," an enterprising newspaper of Port au Prince, published a special English edition of its paper in honor of the American tourists.

### ATLAS LINE STEAMSHIP SERVICE IN HAITI.

The Atlas Line maintains a weekly service to Port au Prince from New York and a fortnightly service to all other ports in Haiti, including Cape Haitien, Port de Paix, Gonaives, Miragoane, and Jeremie.

## HONDURAS

### MESSAGE OF PRESIDENT DAVILA.

According to the message of Gen. DAVILA, President of Honduras, to the National Congress of 1911, the Government continues to give its closest attention to public instruction. The number of pupils who attended the public schools in 1910 was 29,857, of which 18,107 were boys and 11,750 girls. There were opened during the year 357 public schools for boys and 237 for girls, 3 private schools for boys, and 9 coeducational schools. The attendance in other educational institutions was as follows: High schools, 142 pupils; medical school, 19; law school, 52; men's normal school, 165; women's normal school, 160.

The value of imports in 1910 was 4,313,452.28 pesos silver, while exports were valued at 6,429,700.17 pesos silver. Of the imports 68.24 per cent came from the United States, and 87.68 per cent of the exports went to that country. (The silver peso of the Republic has a value of $0.391 United States gold.)

The fiscal revenues during the year amounted to 4,149,082 pesos silver. The balance of the internal debt on August 31, 1910, was 4,053,370.47 pesos silver.

### NEW RAILROAD AND WHARF.

An American company will soon undertake the construction of a wharf in the port of Sal, on the Atlantic coast of Honduras; also a railroad, which will start from the banana plantations in the northern zone of the Republic and terminate at the said wharf.

The work of construction will be under the direction of Mr. CHANUTE, an American engineer, who is already in Honduras making the preliminary surveys.

The proposed line will open up one of the most fertile regions of the country.

### EXPORTS FROM PUERTO CORTES TO UNITED STATES FOR 1907–1910.

CLAUDE I. DAWSON, the United States Consul at Puerto Cortes, Honduras, submits the following table showing the declared exports to the United States for the years 1907, 1908, 1909, and 1910:

| Article. | Value in 1910. | Value in 1909. | Value in 1908. | Value in 1907. |
|---|---|---|---|---|
| Bananas | $935,221 | $841,000 | $1,010,000 | $1,000,000 |
| Plantains | 4,218 | 1,382 | 987 | ..... |
| Rubber | 72,336 | 35,194 | 24,940 | 33,233 |
| Gold, silver, and coin | 25,530 | 1,850 | 56,100 | 19,183 |
| Hides | 20,018 | 15,090 | 11,771 | 19,362 |
| Coffee | 17,177 | 24,607 | 38,488 | 11,950 |
| Sarsaparilla | 9,768 | 22,108 | 19,126 | 26,604 |
| Deerskins | 8,729 | 1,010 | 5,323 | 9,365 |
| Hard woods | 5,838 | 50,694 | 14,308 | 54,398 |
| Coconuts | 1,985 | ..... | 488 | 480 |
| Hats | 1,025 | 863 | 3,081 | 2,200 |
| Alligator skins | 908 | 505 | 1,169 | 593 |
| Liquid ambar | 82 | 70 | 695 | ..... |
| Chicle | 26 | 444 | 1,180 | 125 |
| Miscellaneous | 187 | 443 | 177 | 510 |
| Total | 1,103,048 | 995,260 | 1,187,833 | 1,178,003 |

The exports for the year 1910 show a very favorable comparison with the three preceding years. The tonnage was far in excess of previous years.

In considering values, it should be remembered that prior to 1910 bananas were valued uniformly at 50 cents a bunch; whereas during 1910 the average for all shippers of this fruit was approximately 43.75 cents a bunch. With a 50-cent valuation for 1910, the total figures would exceed those of the preceding years by a substantial margin. Furthermore, while 1910 was locally considered a poor banana year, the figures show that shipments exceeded those of 1907 and 1908 by about 20 per cent each, an of 1909 by near 50 per cent. That faith is still strong in the increasing importance of this industry in the district, is evidenced by the fact that one company commenced operations during 1910, while on January 1, 1911, another company entered the field with contracts for 1,000,000 bunches to be shipped to Galveston, Texas. The three active companies now in the field are shipping to Mobile, New Orleans, and Galveston.

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# MEXICO

## BONDING GOVERNMENT EMPLOYEES.

WILLIAM W. CANADA, the United States Consul at Veracruz, advises that the legislature of the State of Veracruz, Mexico, has approved of the new contract entered into between the Government and the representatives of an American surety company for the bonding of all the public functionaries, employees, or agents entrusted with the care of public funds or values, as well as corporations, companies, or private individuals who contract pecuniary obligations. This measure has been made a law of the State.

## POSTAL COLLECTIONS.

The Mexican Congress has recently passed a law establishing a service in the interior of the Republic for the postal collection of bills, invoices, promissory notes, checks, drafts, and all other documents payable on demand. It may also collect all commercial securities, in general, which are payable without necessitating any expense, provided that the value of such documents does not exceed the maximum amount of an ordinary money order. Documents payable to bearer are exempted from the provisions of this law.

This service may be extended to other sections of the country as may be deemed expedient.

The payment of documents thus presented for collection must be made within fifteen days from the date of the presentation, and must be made in full.

## RIVER NAVIGATION SERVICE.

By virtue of a concession secured from the Mexican Government, the Tabasco-Chiapas Trading and Transportation Company will soon establish a steamship line in the Rivers Grijalva, Usmacinta, and Palizada. The first two are located in the State of Tabasco and the latter in Chiapas.

## INCREASE OF EXPORTS FROM MEXICO TO THE UNITED STATES.

Of especial interest are the various consular reports, which are now being received from the different States of Mexico, showing the value of exports of their districts to the United States. In nearly every case decided increases are noted over preceding years, thus clearly indicating that Mexico is finding a profitable and increasing market in this country for her commodities.

A few leading examples of this increase are the following: The declared exports from the State of Durango for the year 1910, amounting to $13,898,443, represents an increase of nearly 50 per cent over 1909. San Luis Potosi exported to the United States goods valued at $4,395,383.76, an increase of 28.9 per cent over 1909. The exports from Puerto Mexico increased 70 per cent over the preceding year, the respective totals for these two years being, 1910, $293,594, and 1909, $176,968.

### VESSELS CLEARING FROM TAMPICO, 1910.

The United States Consul at Tampico, CLARENCE A. MILLER, submits the following table of vessels clearing from the port of Tampico for ports in the United States for the calendar year of 1910:

| Nationality. | Number. | Gross tonnage. | Net tonnage. |
|---|---|---|---|
| British | 117 | 425,817 | 276,194 |
| Norwegian | 76 | 146,746 | 93,081 |
| United States | 47 | 148,168 | 102,389 |
| German | 45 | 144,034 | 90,528 |
| French | 13 | 76,816 | 48,361 |
| Cuban | 14 | 41,056 | 25,769 |
| Danish | 3 | 7,727 | 4,894 |
| Mexican | 2 | 642 | 635 |
| Swedish | 1 | 2,905 | 1,837 |
| Total | 318 | 993,911 | 643,688 |

### FOREIGN CAPITAL IN THE REPUBLIC.

Below we quote a paragraph relating to Mexico from the Forty-Fourth Annual Report of the Canadian Bank of Commerce, of Toronto, as published by "The London Financial News" for February 1, 1911.

Speaking broadly, the supply of foreign capital has been drawn from the following sources: (1) British, including Canadian, $700,000,000—about 60 per cent being invested in railways, 15 per cent in mining, and 25 per cent in agricultural and other industrial enterprises; (2) United States about $1,000,000,000—about 35 per cent invested in railways, 45 per cent in mining, and the balance in other industries; (3) French, Belgian, Dutch, and Spanish—about $300,000,000 invested largely in bank stocks, in manufactures, and in wholesale and retail trade. The exports of Mexico exceed the imports handsomely. The total trade for the fiscal year 1908–9 was, in Mexican dollars, $387,633,000, imports being $156,533,000 and exports $231,100,000. The corresponding figures for 1909–10 were: Total foreign trade, $454,913,000; imports, $194,857,000; exports, $260,056,000. In every prominent article of export except two there was a considerable advance over the figures of the previous year. The general development of Mexico has been retarded, owing to the fact that large areas of the most fertile land are held by families who have done little to improve their properties and who have been content with the trifling return per acre resulting from unskilled labor. The Government is now trying to convert these often vast estates into small holdings and to encourage farming on more scientific principles. Mexico also possesses immense deposits of iron ore on the Pacific coast, said to be suitable for the production of high-grade steel.

## INDUSTRIAL CONCESSIONS.

The following industrial concessions have recently been granted by the Government of Mexico:

To Mr. RICARDO HONEY, for the establishment in the Republic of the electric process for manufacture and production of iron and steel.

To Mr. MIGUEL BORNIO, for the exploitation and exploration of oil fields in public lands within the Territory of Lower California.

To Gen. FELIX DIAZ, for the establishment of a plant for the manufacture of rubber articles for automobiles and carriages.

To Gen. MANUEL MONDRAGON, for the establishment of a plant for the manufacture of carbonate of soda chemically pure.

## DURANGO'S MINING OUTPUT.

The Secretary of State for Durango has recently issued an official statement on the production of the mines in the State during the year 1909. According to this report the value of the total output of 94 mines was 10,251,547 Mexican pesos.[a]

## THE MINING PRODUCTION IN 1909-10.

According to official statistics, the mining output of Mexico for the fiscal year 1909–10 was valued at 158,965,832.86 Mexican pesos.[a] This represents an increase of 9,017,832.86 over the previous year. The production was distributed as follows:

| | Mexican pesos.[a] |
|---|---|
| Gold | 48,428,841.71 |
| Silver | 76,405,754.15 |
| Copper | 26,172,214.00 |
| Lead | 6,808,465.00 |
| Zinc | 1,150,558.00 |
| Total | 158,965,832.86 |

## WATER-RIGHT CONCESSION IN SAN LUIS POTOSI.

A report from W. L. BONNEY, the United States Consul at San Luis Potosi, states that a twenty-year concession has been granted to the "Compañía Mexicana de Petróleo" to build works to utilize 500 liters per second of the water of the Tamesi River, in the district of Valles, State of San Luis Potosi, for irrigation and for use in their petroleum industry. According to the terms of the concession construction must begin within twenty months and be completed within seven years. The company is required to build bridges over public ways crossed by its canals. It is also granted free entry for its machinery, and for five years is granted immunity from Federal taxation. They are, moreover, prohibited from selling the concession to any foreign interests, and also from selling water rights without at the same time selling the land to be irrigated.

[a] The Mexican *peso* has a value of $0.498 United States gold.

## CENSUS OF 1910.

The Bureau of Statistics of the Republic of Mexico has recently issued the figures showing the population of the capitals of the States of Mexico. All but 3 of the 32 cities show a decided increase in population over the census of 1900, indicating a healthy growth of the cities in the Republic.

| Capitals of States. | Census of 1900. | Census of 1910. | Increase. |
|---|---|---|---|
| Aguascalientes | 35,052 | 44,800 | 9,748 |
| Campeche | 17,109 | 16,864 | a 245 |
| Saltillo | 23,996 | 35,063 | 11,067 |
| Colima | 20,698 | 25,148 | 4,450 |
| Tuxtla Gutierrez | 9,395 | 10,217 | 822 |
| Chihuahua | 30,405 | 39,061 | 8,656 |
| Mexico | 368,898 | 470,659 | 101,761 |
| Durango | 31,092 | 34,085 | 2,993 |
| Guanajuato | 41,486 | 35,147 | a 6,339 |
| Chilpancingo | 7,497 | 7,848 | 351 |
| Pachuca | 37,487 | 38,620 | 1,133 |
| Guadalajara | 101,208 | 118,799 | 17,591 |
| Toluca | 25,940 | 31,247 | 5,307 |
| Morelia | 37,278 | 39,116 | 1,838 |
| Cuernavaca | 9,584 | 12,668 | 3,084 |
| Monterey | 62,266 | 81,006 | 18,740 |
| Oaxaca | 35,049 | 37,469 | 2,420 |
| Puebla | 93,521 | 101,214 | 7,693 |
| Queretaro | 33,152 | 35,011 | 1,859 |
| San Luis Potosi | 61,019 | 82,946 | 21,927 |
| Culiacan | 10,380 | 13,578 | 3,198 |
| Hermosillo | 10,613 | 14,518 | 3,905 |
| San Juan Bautista | 10,543 | 12,084 | 1,541 |
| Ciudad Victoria | 10,086 | 17,861 | 7,775 |
| Tlaxcala | 2,715 | 2,812 | 97 |
| Xalapa | 20,388 | 24,816 | 4,428 |
| Merida | 43,630 | 61,999 | 18,369 |
| Zacatecas | 32,866 | 25,905 | a 6,961 |
| Ensenada | 1,726 | 2,177 | 451 |
| La Paz | 5,046 | 5,456 | 410 |
| Tepic | 15,488 | 16,805 | 1,317 |
| Santa Cruz de Bravo | ..... | 2,258 | 2,258 |
| Total | 1,245,613 | 1,497,257 | 265,189 |

a Decrease.

## THE NATIONAL RAILWAYS IN 1910.

That the national railways of Mexico have made substantial progress in the volume of their traffic is evidenced by the annual report to the stockholders for the fiscal year 1909–10.

A very significant fact which the report points out is that, although only in its second year of operation, the company has already paid dividends of 4 per cent on the first preferred stock.

According to the report the average mileage, operating expenses, and gross and net earnings of the national railways were as follows for the fiscal years 1908–9 and 1909–10:

| | 1908–9. | 1909–10. |
|---|---|---|
| Average mileage | 5,227 | 5,262 |
| | *Mexican currency.* | *Mexican currency.* |
| Gross earnings | $48,805,522.26 | $52,562,293.39 |
| Operating expenses | 29,166,893.33 | 31,593,557.78 |
| Net earnings | 19,638,628.93 | 20,968,735.61 |

Practically all the security holders of the Mexican Central and of the national railroads of Mexico have now exchanged their bonds and stocks for those of the new national railways. Only about 2 per cent of the former now remain unexchanged.

### RAILROAD CONCESSIONS.

The following railroad concessions have recently been granted by the Government of Mexico:

To Mr. CHARLES HOYLE, for the construction of a railway in the State of Michoacan, which, starting from a point between the Pateo and Pomoca stations of National Railroad of Mexico, shall proceed as far as the mining zone of Pomoca.

To the Compañia Carbonifera del Norte, for the construction of a line from the Barroteran station of the International Railroad to the coal fields of Saltillo in the State of Coahuila.

### NEW TERMINAL STATION IN VERACRUZ.

The recently completed building of the Union Terminal Station at Veracruz, which has been two years in construction, is a magnificent structure. Whether viewed from the standpoint of the utilitarian or from that of the lover of the beautiful, its effect is most pleasing. The new depot has occasioned a total expenditure of over $1,000,000. The style of architecture is that of the Spanish colonial period. The building, shaped like a U, consists of two stories, and its equipment is equal to that of any thoroughly modern metropolitan depot.

## NICARAGUA

### ARRIVAL OF UNITED STATES MINISTER.

The United States Minister to Nicaragua, Hon. ELLIOTT NORTHCOTT, and the secretary of the legation, FRANKLIN MOTT GUNTHER, arrived at Managua on February 14, 1911, and opened the United States Legation shortly after.

### RETURN OF FINANCIAL ADVISER.

Mr. ERNEST H. WANDS, appointed by the United States Government as financial adviser to the Government of Nicaragua, has completed his preliminary report and has returned to the United States. Mr. WANDS has been prominently identified with Latin American affairs for a number of years. He represented the United States at the expositions held at Quito, Ecuador, and Buenos Aires, Argentine Republic.

Also at the suggestion of President ESTRADA, the United States Government has designated its consul at Managua, THOMAS P. MOFFATT, a member of the joint commission for the adjudication and adjustment of unsettled claims against the Government.

### EXEMPTION FROM DUTIES DECREE.

A recent executive decree exempts from tariff importation duties all accessories, utensils, and fixtures indispensable to the production of gasoline light imported into Nicaragua.

### COLONIZATION OF THE RIO GRANDE.

There is now in Nicaragua a party of American investors and capitalists making investigations and arrangements for the development and colonization of the Rio Grande territory, a section extremely fertile and abounding in natural resources. This extensive valley has for many years been awaiting the development of transportation facilities in order to become one of the richest sections in the country.

Arrangements are already under way to induce a number of farmers from the United States to locate in the Rio Grande, and it is estimated that at least 200 families will be living in the valley before the end of this year.

The colonists will engage principally in banana growing, the soil and climate of the territory being especially adapted thereto.

## PANAMA.

### EXTRADITION TREATY WITH ECUADOR.

The Government of Panama has ratified the extradition treaty entered into with the Republic of Ecuador on June 4, 1910.

### IMMIGRATION LAW.

By virtue of a recent law the President of Panama is authorized to encourage the immigration of Europeans, preferably Spanish peasants. The Executive is further empowered to sell public lands to immigrants under favorable and easy terms.

### LAW ON SUGAR REFINERIES.

The Assembly of Panama has authorized the President of the Republic to enter into contracts for the establishment in the Republic of sugar refineries, under the terms specified in the law.

### PROMOTION OF SUGAR INDUSTRY.

The National Bank of Panama has been authorized by law to expend $100,000 in the promotion and development of the sugar industry, through loans to sugar planters, under certain conditions.

### INSURANCE LAW.

A law recently passed by the National Assembly of Panama provides that foreign insurance companies must secure authorization from the Executive in order to establish agencies in the Republic. Failure to comply with this law is punishable by a fine of $100 to $1,000 for each policy issued.

To secure this authorization the company must prove that it has been organized in accordance with the laws of its country; it must invest in real estate in the country or deposit in the National Bank the sum of $150,000; and it must show that its agent has been given full powers to represent the company.

### NATIONAL SCHOOL OF AGRICULTURE.

A recent law of the Assembly of Panama creates a National School of Agriculture, under the supervision of the Department of Public Instruction.

### GOVERNMENT PRINTING OFFICE.

The National Assembly of Panama has created by law a Government printing office in the city of Panama, as a division of the Department of Public Instruction.

### NATIONAL SCHOOL OF TELEGRAPHY.

A law of the Assembly of Panama creates in the capital of the Republic a National School of Telegraphy, for both sexes.

### LAW ON SANITARY POLICE.

A recent issue of the "Gaceta Oficial," of Panama, contains the law passed by the National Assembly, on sanitary police. Under the terms of this law, the medical officer is charged with the duty of enacting health regulations for the towns under his jurisdiction.

### BANKING LEGISLATION.

By virtue of a law of the Assembly of Panama the name of the Mortgage Bank of the Republic has been changed to that of Banco Nacional, under which new denomination it is authorized to engage in all banking operations. Its capital has been increased by the additional sum of $250,000.

Another law provides that all banking institutions in the Republic shall be under Government supervision. It also authorizes the National Bank to issue bank notes to the amount of $500,000.

### TARIFF MODIFICATIONS.

The following tariff changes have recently been enacted by the Legislature of Panama:

Commercial printed matter of a given value shall pay an *ad valorem* import duty of 40 per cent.

Commercial printed matter of no value shall pay as import duty 40 per cent of the such value as may be appraised thereon by two experts.

Newspapers, printed books, and blank books containing samples shall be free of duty when imported through the post offices.

Liquors shall pay import duties as follows: Brandy, gin, whisky, anisette, "rosoli," and "naranjito," up to 21° by the Cartier aerometer, $1 per liter. Chartreuse, creme de cacao, peppermint, Kerman, kümmel, absinthe, etc., of from 24° to 42°, $1.25 per liter. Imported beer shall pay a duty of 15 cents per liter.

### DUTY-FREE ARTICLES.

The National Assembly of Panama has declared the importation of the following articles free of duty: All kinds of machinery, types and instruments for printing, engraving, lithographing, phototyping and bookbinding purposes, ordinary paper for periodicals, and printer's ink. Articles imported by the President of the Republic for his own personal use. Pedigreed live stock imported for breeding purposes. Construction materials for public or private cemeteries.

### A PROPOSED WORLD'S FAIR FOR 1915.

An organization has been formed in Panama, under the name of "Panama World's Fair Association," for the purpose of holding an exposition in 1915 to celebrate the opening of the canal. The association has started its work with great enthusiasm and full confidence in its success. The National Assembly of the Republic has displayed its interest and support of the movement by voting an appropriation of $100,000 gold, and it is confidently predicted that this substantial assistance will bring more.

### SLAUGHTERHOUSE IN PANAMA CITY.

The National Assembly of Panama has appropriated the sum of $50,000 for the construction of a new slaughterhouse on hygienic and modern principles, to be erected at a distance from the city of Panama.

## PARAGUAY

### SUCCESSFUL METHOD OF INTRODUCING GOODS INTO LATIN AMERICA.

Cornelius Ferris, Jr., the United States Consul at Asuncion, submits an illuminating report on the "Successful Method of Introducing Goods into Paraguay." We take pleasure in publishing it in

full, inasmuch as the conditions described in this instance are typical of conditions throughout Latin America.

Manufacturers of labor-saving implements, many of whom write to this consulate asking for suggestions as to the best method of introducing their goods to the markets of Paraguay, will be interested in the success of an American salesman who recently called on a local dealer with a model of the agricultural implement manufactured by the house which he represents. The model was a very complete, attractive piece of workmanship, more expensive than the implement itself, the practical use of which was fully set forth in a well illustrated catalogue. But one call was necessary to interest the local dealer sufficiently to place an introductory order which entirely exceeded the expectations of the salesman, and more than justified his long trip of 1,100 miles from Buenos Aires to Asuncion. It led further to a call on the Agricultural Bank of Paraguay (Banco Agricola del Paraguay), where the impression made by the model was so favorable that one was requested to be kept at the bank for purposes of demonstration. The Agricultural Bank of Paraguay is a Government institution for rendering financial aid to farmers. It also placed an order for the implement, which it intends to sell to farmers at cost. Incidentally it may be mentioned that the importer, who probably handles more American goods than any other house in this country, stipulated as an indispensable condition that his directions as to circulars accompanying the goods, manner of shipping, etc., should be strictly followed, declaring emphatically that he would have nothing more to do with Americans who refuse to follow instructions.

### THE CONVERSION FUND.

The account of the fund for the conversion of paper money, deposited at the Bank of the Republic, amounted on December 31, 1910, to $692,376.87 gold. The issue of paper was 35,000,000 pesos.

## PERU

### REPORT OF PERUVIAN CORPORATION FOR FISCAL YEAR 1909–10.

The report of the Peruvian Corporation for the fiscal year ending June 30, 1910, shows, after paying the 4 per cent interest on the debenture bonds, a surplus of £285,000, as compared with £230,000 for the fiscal year 1908–9.

One of the important transactions of this company during the past year was the acquisition of the Guaqui to La Paz Railway and the Lake Titicaca steamer line, used in connection therewith. This purchase has encouraged the Southern Railway to establish a weekly through express sevice between La Paz and Mollendo, requiring only twenty-nine hours to make the trip and enabling the journey from La Paz to Lima to be made in connection with the Royal Mail steamers once in every two weeks in about sixty hours.

Another notable work of the Peruvian Corporation during the fiscal year under consideration was arranging for a survey for a railway to start at Urcos, a station on the Southern Railway near Cuzco, and extend to the head of unobstructed navigation on the

Madre de Dios River, one of the principal tributaries of the Amazon. The section which this proposed railway will penetrate is exceedingly rich in mineral, forestal, and agricultural wealth and will place in easy rail and water communication one of the great rubber-producing regions of South America. The corporation is given the preferential right to construct this railway for a period of three years after the completion of the survey. Several engineering parties are now in the field engaged in making the survey, and it is hoped that the actual construction of the line will be begun at no distant date.

### NEW EDITION OF COMMERCIAL AND CUSTOMS REGULATIONS.

A new edition of the "Commercial and Customs Rules of Peru" has recently been ordered printed by the Treasury Department of the Peruvian Government to meet the heavy demand for this publication by leading trade and commercial firms. An expert has been engaged to make the necessary changes on the old edition to bring it up to date.

The new edition will be limited to 1,000 copies, which will be turned over to the "Compañía Nacional Recaudadora," of Lima, and sold at a nominal price to be fixed by the Treasury Department.

### INSURANCE PROFITS IN 1910.

The year 1910 was a most profitable one for insurance companies doing business in Peru. For example, the Rimac Insurance Company, of Lima, during the year mentioned increased its reserve fund from £62,191 to £67,205, and paid to its stockholders at the close of the year a dividend of 19 per cent in addition to the interim dividend of 8 per cent paid on June 30, 1910. The International Insurance Company, of Lima, notwithstanding the fact that it was called upon to make heavy payments to its policy holders in 1910, was enabled to increase its reserve during that year and to pay a dividend of 10 per cent on its capital stock.

### WIRELESS STATION AT LIMA.

In addition to the wireless telegraphy station located at Callao, near the capital of the Republic, a new installation, including the erection of an 80-meter tower, is to be established on San Cristobal Hill, which rises above the city of Lima to a height of over 1,300 feet, and is therefore suitably adapted to a wireless service. It is the intention of the Government to use apparatus of sufficient power to enable direct communication with Iquitos, a distance of about 700 miles. If, however, direct communication should prove impracticable on account of the great height of the Andes range, the lowest point of which is over 15,000 feet, the plan of the Government is to equip an intermediate wireless station for the purpose of making communication easy and practicable.

Peru now has an overland wireless telegraph system between Iquitos, the head of steam navigation for large vessels on the Amazon, and Puerto Bermudez, on the Pichis River about 100 miles from Oroya. The terminals of the present system are, approximately, 500 miles apart, and much of the intervening distance is a tropical jungle, and if it were not for the intervening snow-capped cordillera there would be no serious physical difficulties to overcome in establishing direct wireless communication between the two cities.

### NATIONAL AVIATION SCHOOL.

A National Aviation School, under the patronage of the Federal Government and the first of its kind to be established in South America, has recently been opened at Lima, Peru. The Director of this useful and novel institution is the distinguished Peruvian aeronaut, Mr. JUAN BIELOVUCIC, assisted by Mr. HENRI CHAILLEY. The attendance in the school will be limited to 12 pupils until more accommodations are provided for. The Peruvian Government will pay the tuition of 8 of these pupils, and private individuals and the aero clubs will look after the other 4. The tuition fee has been fixed at £180, and the pupils will be held responsible for all damages caused by them to the apparatus. At present, Mr. BIELOVUCIC uses the latest type of the Voisin biplanes, imported from France, and equipped with Gnome motors. Mr. BIELOVUCIC has achieved remarkable success as an aeronaut in Peru.

### CONGRESS OF NORMAL TEACHERS AT AREQUIPA.

On January 21, 1911, a congress of normal-school teachers met in the hall of the University of San Agustin, at Arequipa, Peru, to discuss educational matters, particularly in regard to the furtherance, development, and improvement of the public-school system of the Republic. At its first session the Congress elected the following officers: LUIS H. BOURONCLE, President; JOSÉ A. ENCINAS, Vice-President, and HUMBERTO LUNA and LUIS PINTO, Secretaries. During the remaining sessions of the Congress many able papers on educational subjects were offered for consideration, and a number of instructive discourses were presented by members and invited guests. The greatest harmony, interest, and enthusiasm prevailed during all the meetings. The Congress made 100 recommendations on educational topics, all of which will be submitted to the consideration of the Federal Government. After an interesting discourse on "The education of the indigenous races," delivered on February 6, 1911, by Doctor PASTOR, the prefect of Arequipa, the Congress adjourned.

### CUSTOMS RECEIPTS AT CALLAO IN 1910.

The customs receipts collected at the port of Callao in 1910 amounted to £797,867. The largest receipts collected during the year were those for the month of June, amounting to £84,343.

### COPPER PRODUCTION IN 1910.

In 1910 the fine copper contained in blister copper, copper matte, and copper ores shipped from Peru aggregated 26,000 metric tons, or a gain of 7,000 tons of fine copper over the shipments of the previous year.

### NEW STEAMERS FOR PERUVIAN STEAMSHIP COMPANY.

The new steamship, *Mantaro*, built in France, for freight and passenger service on the Pacific coast, recently arrived at the port of Callao, Peru. Another passenger and freight steamer, also constructed in France for the Peruvian Steamship and Dock Company, of Callao, is due at the same port in May. When these two vessels, together with the *Pachitea*, now building in France for the same company, reach Peru, the company proposes to inaugurate a coastwise service between Callao and Paita, Peru, and Valparaiso, Chile. Another steamer, the *Huallaga*, is being built for this company in England. On its completion the Peruvian Steamship Co. proposes to assign it and the *Ucayli* to weekly sailings between Callao and Panama.

### PROGRESS ON HUACHO RAILWAY CONSTRUCTION.

So rapidly is work progressing on the Huacho Railway that the contractors predict the establishment of connections with Lima, the capital of the Republic, by the end of the present year, and the opening of the entire road to traffic in January, 1912. The completion of this line is of particular importance to the fertile and productive valleys of Supe, Huaura, Chancay, and Carabyllo, as it will place them in direct and rapid communication with the metropolis of the country as well as the commercial centers of the nation. The value of agricultural and grazing lands in these districts will no doubt be greatly enhanced, while this improved method of transportation should tend to reduce the price of the necessities of life at the capital and other cities in Peru.

## SALVADOR.

### INAUGURATION OF PRESIDENT ARAUJO.

Dr. Manuel Enrique Araujo and Señor Onofre Duran, elected President and Vice-President of the Republic of Salvador, respectively, were formally inaugurated on March 1, 1911, for a four-year term ending March 1, 1915.

## MESSAGE OF THE RETIRING PRESIDENT.

Through the courtesy of Señor Don JOAQUIN BERNARDO CALVO, the Minister of Costa Rica to the United States, who is in charge of the legation of Salvador in the absence of the Minister of Salvador, the Pan American Union has received a copy of the message of Gen. FERNANDO FIGUEROA, the retiring President of Salvador, delivered February 8. President FIGUEROA reviews, in an able manner, the conditions of the country and the progress it has attained during the four years of his administration. The message describes the Government's foreign relations with the powers of both hemispheres as being amicable and cordial. In speaking of the United States, Mexico, and Central America, the Executive says:

I have given particular attention to the extension of the good and cordial relations that have for a long time bound us to the Government of the United States of America, whose altruistic spirit toward the rest of the continent I am pleased to sincerely acknowledge and proclaim. This, without doubt, is due to the happy circumstance for us of having the American legation, accredited near this Government, in charge of the honorable gentleman and upright diplomat, His Excellency WILLIAM HEIMKE, who has shown, on more than one occasion, the high spirit of harmony and justice with which he is imbued and the exquisite tact with which he manages the affairs of the post which he so worthily occupies.

With the Government of the United States of Mexico we also conserve the close and friendly relations which have always been maintained, due to the bond of sympathy which exists between the peoples of both Republics.

With the Central American States—fragments of the great country of our forefathers—I have endeavored to maintain the closest bonds of amity and have taken great pains to develop ideas and sentiments of that intimate confraternity which should exist between sister republics that form a single family.

The Department of Agriculture has undertaken important works during the presidency of General FIGUEROA, under the able direction of the learned naturalist, Dr. CARLOS BENSON. An experiment court has been provided where new crops and improvements that may be introduced are studied daily, and visits are had from all parts of the country by persons in search of new plants and rare shrubs the cultivation of which may be encouraged on a large scale.

Two large water tanks of the "Hennevique" system, with a capacity of 6,000,000 liters, have been constructed in the western part of the capital for supplying the city of San Salvador with water. These deposits are of iron and block cement, and were ready for use on June 12, 1910. A "water board," having the support of the Government, has been organized, the object of which is to furnish a sufficient water supply to the towns of Mejicanos, Cuscatancingo, Ayutuxtepeque, San Marcos, Aculhuaca, San Sebastian, and Paleca, which towns supply the city of San Salvador with provisions and grains.

Speaking of facilities for communication, the President says that the Government has encouraged the construction of a number of important wagon roads, some of which will soon be opened to public

service. Among these is the "Great Avenue," which connects the capital of the Republic with the city of Santa Tecla. Another work of great utility is the international bridge, which is to be constructed over the Sumpul River, in the Department of Chalatenango, at the Guarita ford, and which will be a powerful factor in increasing the commerce with Honduras. This bridge will be erected with Government funds and in accordance with provisions arranged with the Government of Honduras.

Public instruction is receiving the special attention of the Government. The number of schools established is 477, but due to the lack of sufficient teachers who have the educational and moral qualifications so rigorously required, only 431 of them are in operation. The number of pupils matriculated was 31,939, and the average attendance 26,537. During the year schools were opened in 275 towns and villages. According to the message of President FIGUEROA, 3 per cent of the population of Salvador receive instruction in Government schools, and this percentage is increased to about 4 per cent if the private schools are included. The proportion of the school population of the Republic is 67 per cent.

Discussing the finances of the country, the President states that his great desire was to see that the receipts and disbursements of the nation were handled with the greatest honesty and economy, making such savings as were compatible with good public service. The following tables show the receipts and expenditures of Salvador for 1910:

RECEIPTS.

| | Colones.[a] |
|---|---|
| Customs revenues | 6,220,330.14 |
| Liquor tax | 2,602,958.33 |
| Sealed paper and stamps | 297,912.24 |
| Sundry receipts and services | 1,499,664.86 |
| Miscellaneous receipts (deposits, refunds, etc.) | 2,630,760.70 |
| Total | 13,251,626.27 |

EXPENDITURES.

| | |
|---|---|
| National Assembly | 40,764.57 |
| Presidency of the Republic | 10,635.00 |
| Department of Interior | 1,937,948.18 |
| Department of Fomento | 996,429.57 |
| Department of Public Instruction | 492,174.38 |
| Department of Foreign Relations | 224,307.86 |
| Department of Justice | 498,929.12 |
| Department of Beneficencia (Charity) | 508,350.06 |
| Department of Treasury | 590,818.19 |
| Department of Public Credit | 4,059,658.28 |
| Department of War and Navy | 3,067,531.75 |
| Sundry disbursements (deposits, refunds, etc.) | 178,701.35 |
| Total | 12,606,248.31 |

[a] The *colon* or *peso* has a value of approximately $0.403 United States gold.

The commercial statistics included in the message show the imports and exports in 1910, as compared with 1909, to be as follows:

| | 1909.[a] | 1910. |
|---|---|---|
| Imports | $4,176,931.56 | $3,745,249.19 |
| Exports | 8,481,787.65 | 9,122,295.09 |

[a] American gold.

## CUSTOMS TARIFF SYSTEM OF THE REPUBLIC OF SALVADOR.

Through the courtesy of THOMAS EWING DABNEY, the United States Consul-General at Salvador, the BULLETIN is in receipt of the following detailed explanation of the tariff system of the Republic of Salvador.

### I.—EXPLANATION OF SYSTEM.

According to the Salvadorian tariff system, each article has assigned to it a certain fixed appraisement (called an "aforo"), per kilogram of gross weight, which serves merely as a basis for calculating the duties and imposts mentioned in paragraphs (*a*) and (*b*) below.

(*a*) Ten per cent, 5 per cent, and 22 per cent (total 37 per cent) of the aforo, payable in United States gold; and

(*b*) Forty-one per cent, 3 per cent, 2 per cent and 30 per cent (total 76 per cent) of the aforo payable in Salvadorian currency.

In addition, imposts of $3.60 and $2.40 (total $6), United States gold, are collected on each 100 kilograms of gross weight; but certain articles (indicated by an asterisk in the Tarifa de Aforos) are exempt from the payment of these two imposts, and are subject instead to an impost of $2.25, United States gold, per 100 kilograms. Also, there is a stamp tax of 1 per cent silver of the aforo on all articles except those specified under caption III.

The customs-house fees amount to $4, pesos for each entry, and the charges for storage (for the first two months or fraction) and porters amount to about $1, peso per 100 kilograms. For the second two months or fraction, storage costs $1.50, pesos per 100 kilograms.

### II.—METHOD OF COMPUTING.

The aforo is given in the *Tarifa de Aforos* (for sale by the Tesoreria General, San Salvador, at 50 cents, United States currency, a copy); and the customs and other charges are then computed as follows: For example, the aforo on a given article is $1 silver per kilogram. Then—

One hundred kilograms by $1 is $100, silver appraisement, which forms the basis of the calculations. Then—

*Form D.*

| | United States currency. | Salvadorian currency. |
|---|---|---|
| 37 per cent gold of $100 silver (appraisement) | $37.00 | |
| 76 per cent silver of $100 silver | | $76.00 |
| Imposts[a] | 6.00 | |
| Clearance fees, porterage, etc. (about) | | 5.00 |
| Stamps, 1 per cent silver of $100, appraisement | | 1.00 |
| Total | 43.00 | 82.00 |
| Percentages and charges the same on every import, which is | | 116.00 |
| Duties per 100 kilos | | 198.10 |
| Duties per kilo | | 1.98 |

[a] These imposts are substituted by an impost of $2.25, United States currency, on certain articles indicated by an asterisk in the Tarifa de Aforos.

Exchange rate used in above computation: 170 per cent premium on American currency

### III.—Imposts and Stamp Taxes.

In addition, the following imposts are collected on:

| | Imposts. |
|---|---|
| Cement | 0.50 gold per 100 kilos. |
| Liquors | .10 to 20 silver per kilo. |

Instead of the above-mentioned stamp tax of 1 per cent silver of the aforo, the following stamp taxes apply to:

| | Stamp taxes. |
|---|---|
| Beers | 0.01 silver per bot. |
| Candle materials | .02 silver per kilo. |
| Match materials | .01 silver per kilo. |
| Mineral and gaseous waters | .01 silver per bot. |
| Tobacco, manufactured | .75 silver per kilo. |
| Wines | .01 silver per bot. |

### IV. Analysis Taxes.

Lastly should be added the analysis taxes as follows:

| | Analysis taxes. |
|---|---|
| Strong liquors | per 24-oz. bot. 0.50 silver. |
| Heavy wines and white wines | per 24-oz. bot. .25 silver. |
| Red table wines | per 24-oz. bot. .05 silver. |
| Beer | per 12-oz. bot. .03 silver. |
| Canned goods | per kilo. 0.10 silver. |

### V.—Consular Invoices.

Consular invoices should be procured from a consular officer of Salvador in the country of export, but they are paid for here at the following rates in United States gold.

| | |
|---|---|
| For shipments under $25 in value | $1.00 |
| For shipments between $25 and $100 in value | 2.00 |
| For shipments between $100 and $500 in value | 4.00 |
| For shipments between $500 and $1,000 in value | 6.00 |
| For shipments between $1,000 and $5,000 in value, 25 cents for each [a] | 100.00 |
| For shipments exceeding $5,000 in value, 10 cents for each [a] | 100.00 |

In the absence of a consular invoice, a special examination of the goods is made, for which an additional tax of 25 per cent of the duties and imposts is collected.

In consular invoices the goods should be designated by the names under which they appear in the Tarifa de Aforos.

Goods sent by parcels post should be accompanied by a commercial invoice for the use of the customs officials. In this case a consular invoice is not needed.

# UNITED STATES

## ADDRESS BY SENATOR BARON D'ESTOURNELLES DE CONSTANT.

By arrangement of the American Society for International Conciliation, Senator Baron D'Estournelles de Constant, the distinguished French statesman, who is making a visit to the United States under direction of this association, delivered an address Wednesday evening, March 15, at 8.30 o'clock, in the Hall of the Americas of the new Pan American Building. The subject of Baron D'Estournelles's address was "The Mission of the United States, What

[a] Or fraction thereof.

America has Already Done and What She Must Still Do for the Salvation of Europe and the World."

Baron D'Estournelles was introduced by Mr. James Brown Scott, the eminent authority on international law, who presided at the meeting.

### BUREAU OF MINES CIRCULARS.

Miners' Circular No. 1, the first of a series of articles to be issued by the Federal Bureau of Mines, has just been issued. These publications are written in plain, nontechnical language for the benefit of the miner, and may be obtained by applying to the Director of the Bureau of Mines, Washington, D. C. Circular No. 1 contains the names of the permissible explosives tested by the bureau at its Pittsburg station up to November 15, 1910, and gives precautions as to their use.

## URUGUAY

### INAUGURATION OF PRESIDENT BATLLE.

Dr. Alfredo de Castro, Chargé d'Affaires of Uruguay in Washington, has informed the Pan American Union that on March 1 last Señor José Batlle Ordónez was elected President of the Republic by the Legislature of Uruguay, and took the oath of office on the same day. The term of office is four years.

### PRESIDENTIAL MESSAGE.

On February 18, President Williman formally opened the sessions of Congress.

In his message the President calls attention to the fact that at the end of his four years' term of office the Treasury showed a surplus of 40,000,000 francs and that this was obtained without increasing the present taxes or creating new ones.

The salaries of officials and employees of the State were regularly paid and all obligations of the State were promptly met.

Only one loan of 30,000,000 francs was negotiated and that was for public works.

The public debt was diminished by 50,000,000 francs and territorial property has tripled in value.

In regard to public instruction, he showed that more has been accomplished in this department during the present administration than in the thirty preceding years.

The reading of the message of President Williman, whose term expired on the 1st of March, was warmly applauded by the Congress.

### NEW MINISTER TO THE UNITED STATES.

Señor Don Carlos Maria de Pena has been appointed Minister of Uruguay to the United States and is expected to leave for his post in Washington soon.

## BANK OF THE REPUBLIC.

The earnings of the Bank of the Republic in 1910 were $1,041,178.59, or the greatest gain that the institution has experienced since its establishment in 1897. Twenty per cent of these earnings were applied equally to the amortization of the free shares of the bank and to the increase of the reserve fund. The remaining 80 per cent, or $832,942.87, went to the State as its part of the dividend.

The gains of this bank during the period from 1897 to 1900 were less than $300,000 annually, after which time they increased gradually until in 1908 they passed the million-dollar mark. When the Bank of the Republic commenced business it had a paid-up capital of $5,000,000, while on December 31, 1910, the paid-up capital of the institution was $7,531,181.55. The cash on hand in the vaults of the bank was $17,823,000 in 1910, as compared with $1,659,000 in 1897. The bank notes in circulation in 1897 amounted to about $400,000, while at the close of 1910 they had risen to the sum of $20,754,000. The deposits on hand in 1897 aggregated $525,000, as compared with $8,000,000 at the beginning of 1910, and the loans of the bank, which in 1897 amounted to $2,850,000, had risen, at the beginning of 1910, to $16,223,000.

## MOVEMENT FOR CLOSER COMMERCIAL RELATIONS WITH BOLIVIA.

A casual survey of the dissimilarity of staple articles exported by Bolivia and Uruguay clearly shows the great desirability of closer commercial relations between these two countries, and of the mutual advantages that would result therefrom. Bolivia, with her inexhaustible mines of tin and precious metals, is a natural market for the consumption of the meat extracts, jerked beef, tallow, and lard of Uruguay. The chief difficulty, however, hitherto experienced by the two countries in the exchange of their respective commodities has been the question of transportation. Recently a distinguished Bolivian statesman and journalist, Mr. Alberto Diez de Medina, of La Paz, was commissioned by his Government to take up the buestion of closer commercial relations with the Government of Uruguay, with the ultimate object of preparing a basis for concluding a commercial treaty between the two nations. The idea of a commercial treaty, although yet in its infancy, is already receiving the favorable and cordial consideration of the Uruguayan Government.

Mr. Medina, in explaining his plans to the Uruguayan Government and people, through official talks and press interviews, emphasized the fact that Bolivia is constantly in need of some of the great and valuable export products of Uruguay. While, at the present time, a small commerce exists between them in such articles as jerked beef, flour, tallow, and lard, the Uruguayan product mostly in demand and having the greatest and widest field of consumption in Bolivia is jerked beef.

A glance at the map will show that the waterways of the western boundary of Uruguay, communicating with the interior of that country, extend almost into the very heart of Bolivia. Consequently a direct line of steamers of light draft from Montevideo and other Uruguayan ports to Bolivian ports on the Paraguay River would be most feasible. It would stimulate trade and render easy and inexpensive an advantageous exchange of commodities.

### INTERNATIONAL SOUTH AMERICAN POSTAL BUREAU.

The South American Postal Congress, held at Montevideo January 11 to February 2, 1911, provided for the establishment in that city of an International South American Postal Bureau to operate under the direction of the Government of Uruguay. The object of the bureau is to collect, arrange, publish, and distribute data of especial interest to the postal service of the South American countries and to do whatever may be necessary to secure and maintain a good postal service in the countries which participated in the congress. The countries represented in the new bureau are Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela.

In case of litigation or disputed questions regarding South American postal matters, the bureau will, at the request of the parties interested, render an opinion. The bureau will also serve to inform the participating countries of such changes or modifications as may occur in the postal laws; of changes which may be made; and of practical results obtained from administrative laws, rules, and regulations adopted for use in the internal service of the countries constituting the Union.

To the bureau is intrusted the publication of the following postal data: The compilation of the South American Postal Guide; the preparation of a map or chart showing South American postal routes; the compilation of a résumé of statistics showing the inter-American postal movement, in accordance with the data furnished the bureau by the postal authorities of the different countries; the making of a chart showing the most rapid means for forwarding the mails between the contracting countries; and, in addition, to make such other studies as it may be requested to in the interest of the South American Postal Union.

The sum of 20,000 francs annually has been fixed for the maintenance of the bureau. Each country participating has been requested to furnish the bureau with a postal guide, a map or chart showing its domestic and foreign postal routes, and inter-American postal statistics. The bureau will deliver to each of the continental offices, and to the international office at Berne, three copies of all the documents published by it, and will prepare the works of the congresses or conferences and furnish the necessary documents for the formula-

tion and distribution of amendments, resolutions, and other reports. The director of the bureau will be present at the sessions of the congresses or conferences and will have the right to take part in the discussions, but shall only vote when he is the representative of some one of the countries of the Union.

## ART EXHIBITION AT MONTEVIDEO.

Elsewhere in this issue of the BULLETIN editorial mention has been made of the United States Exposition of Paintings and Bronzes, at Montevideo, Uruguay, arranged through the commendable efforts of Hon. EDWIN V. MORGAN, the United States Minister to Uruguay. Further information is now received from Mr. MORGAN in which he states:

The exposition of paintings and bronzes by United States artists has been successfully inaugurated and will be open a month. It is not only the first exclusively American fine arts exposition in Latin America, but the first exposition of foreign art in Uruguay. The collection consists of 89 paintings and 31 bronzes from the United States section of the International Fine Arts Expositions of Buenos Aires and Santiago de Chile, and of 58 paintings which have been expressly brought from the United States and will be exhibited only in Montevideo.

We are indebted to Mr. MORGAN for the following two translations of articles appearing in the local press describing the exhibit.

"El Día" of February 7, 1911, writes as follows:

THE AMERICAN ART EXHIBIT—FIRST NIGHT—FIRST IMPRESSION.

The Pavilion of Parque Urbano, which has been shut and dark since the memorable days of the Exposition of the Fine Arts Club last year, was resplendent last night for the inauguration of the American Art Exhibit.

The building, pierced by its numerous windows, above and below, gave at a distance the impression of an enormous lighted lantern.

The hall, with slight exceptions, was arranged as before. The paintings were hung in a single row which ran all the way around the walls.

The decorations were of the simplest and included over the entrance—a Yankee idea—the well-known flag of the Union and our flag with it.

The American Minister, Mr. MORGAN, to whom the initial idea of the art exhibit is principally due and who last night was all attention, should be sincerely satisfied with the result of the Exposition and of his inaugural "fiesta," which took the form of a fashionable reception.

Intelligent persons undoubtedly were convinced of the powerful productive force of our artist friends of the Northern Republic, observing its development on native soil and amidst the not very helpful influence of the great industrial and commercial activity surrounding it on all sides.

Keeping as much national flavor as possible in view of their cosmopolitanism, these artists have shown us Indians, snowy pine forests, plains, which make one think of bisons and trappers, far removed from the impressionism of WHISTLER, separated by the ocean from the influence of the great SARGENT.

As soon as opportunity presents itself, we will, as we have already said, discuss the Exposition in detail; awaiting the arrival of the new section of works from the United States, which will be here next week.

Before closing it is only fair publicly to commend the work of our Circulo de Bellas Artes, which contributed its furniture and effects, and thus facilitated greatly and with laudable disinterestedness the organizers of the American Exposition.

"La Razon," of February 7, 1911, reviews the Exposition as follows:

THE AMERICAN EXPOSITION OF PAINTINGS AND BRONZES.

MAGNIFICENT EXPONENT OF THE ASPIRATIONS OF A PEOPLE—WHAT THE CRITIC OBSERVES IN A FIRST TOUR AMONG THE PICTURES AND SCULPTURES.

It was a hurried visit which I made last night to the American Exposition of Paintings and Bronzes which Mr. CHARLES FRANCIS BROWNE has organized in the Hygiene Pavillion of the Parque Urbano.

* * * * * * *

Yet the quickly formed impression permits judgment on the total effect of the Exposition, which for us undoubtedly forms a real artistic event. All the schools, all the tendencies, and the nervousness and doubt of modern painting, in the last 20 years, are admirably shown in the collection which fills the Hygiene Pavillion. Punctilious painters, divisionist painters—vague, realistic, and impressionist painters—all are well represented here. No string is missing in the lyre nor color in the palette.

As with all art at its beginning, the American seeks models, and seeks them naturally among the foreign masters whose great influence has kept them in the art current of these latter days. French art is that which the Americans have studied most directly, especially in form and technique, as the works exhibited show. And this fact is, apart from many others, one of the pleasing aspects of the Exposition. Instead of following the example of other new peoples—new in art—who like to imitate everything that has gone before, the American, until lately absorbed in material things, has limited himself in his first attempts to using foreign forms it is true, but also materials drawn from the home soil.

Thus one can see in all the Parque Urbano paintings and bronzes a strong desire to study the native field down to its smallest details, to reproduce with the greatest possible fidelity the beauty of its landscapes, the clearness of its skies, the deep blue of its waters, the giddy whirl of its general existence, and the gentle intimacies of the hearth. And into their work they put an admirable nobility and sincerity. Neither the painter nor the sculptor sacrifices truth to beauty or originality of form. No. Truth predominates over form to such a point that some of the works show the rare mixture of certain themes with certain styles. Sure of its mental power, as it is of its physical power, the American Nation wishes to create its own art school, which, while reflecting the splendors and influences of other schools, will be always a clear exponent of its aspirations, customs, joys, and sorrows. This Nation begins well in art and reveals at the start that in a short time it will free itself from foreign teachings and capricious emulations. This hope is represented by artists of the force of RALPH CLARKSON ("Mr. L. TAFT," No. 15), a work marked by its style, color, and form; of the genius of W. ELMER SCHOFIELD, who shows a landscape ("The First Days of Spring," No. 95), which is a marvel of light, perspective, and tone; of the robustness and originality of FREDERICK W. WAUGH, who has painted a splendid marine ("On the High Seas," No. 111), marked by its fine color, by the movement of its waves, and by the tone which distinguishes it from all others in the Exposition; by the simplicity and appropriate solidity of MARION POWERS, whose painting ("The Reunion," No. 84), draws the observer's attention in an extraordinary manner by the expression wonderfully conveyed on the face of the girl holding a cat—this is a model of reality, suavity, and truth; and, not to mention others, of W. L. METCALF, WALTER L. PALMER, SERGEANT KENDALL, LILLIAN GENTH, and others of this great Nation, which in its heart (though it is tireless in its accumulation of wealth and audacious world schemes) bears a soul sensible to all the emotions of beauty and a spirit ready to launch itself with decision and hope upon moral and intellectual conquests, which form the highest aspiration of all nations and all peoples. The Parque Urbano Exposition, which deserves more space and attention than I give it here, is a revelation and a triumph for the great northern Republic, for whom the phrase—"where there's a will there's a way"—seems to be specially made.

# VENEZUELA

## CHANGE OF SAILING DATE OF RED "D" LINE.

The Red "D" Line of steamships have changed their schedule for steamers which touch at Venezuelan ports and have added Mayaquez, Porto Rico, to their itinerary. Their boats will leave New York on Wednesday of each week instead of Saturday, as formerly. They will arrive at Maracaibo on Sunday and leave the following Wednesday of each week. This change of schedule was made at the request of the merchants of Maracaibo, because all lake steamers connecting this city with the other lake ports leave on Saturday. The present arrangement will distribute the shipping business over the whole week and will relieve congestion of traffic on Saturdays.

## VENEZUELAN TARIFF CHANGES.

Isaac A. Manning, the United States Consul at La Guaira, Venezuela, reports the following recent decrees affecting the Venezuelan tariff laws. A Presidential decree of January 19, 1911, simplifies Classes V–VII as follows:

### Class V.

*No. 331.*—Bramant, sail cloth, ticking, domestic, warandol or Ireland, crude, of linen or cotton, used in the manufacture of hammocks, and all other raw fabrics of this character.

*No. 335.*—White or colored cotton drill, crossed or elaborated weave, loosely woven or not, weighing to exceed 130 grams per square meter not specified in other numbers, and white or crude toweling.

*No. 381.*—Little linens, warandol drills, of crude base or with lines or square checks of color, little linens of colored base remaining in the sixth class when they do not weigh to exceed 130 grams per square meter.

*No. 446.*—Suppress from this number fabrics weighing more than 130 grams to the square meter, same being included in No. 355.

### Class VI.

*No. 424.*—Undervests, hose, corset covers, caps, or other articles of half point of cotton; undervests or undershirts with collars and cuffs or made to wear with false fronts and collars with additional surcharge of 50 per cent of duty.

### Class VII.

*No. 484.*—Undervests or undershirts, hose, or other articles of pure wool or mixed with cotton half point.

*No. 500.*—Undervests or undershirts, drawers, and hose of pure linen or mixed with cotton half point.

The Government of Venezuela has decided that when woven-wire fencing for fencing corrals for birds or domestic animals shall express the size of mesh in centimeters in the consular invoice that such wire in order to enjoy the free entry privilege shall have a mesh at least 3 centimeters square. Woven wire of a smaller mesh will pay the

duty of class 3 of the customs tariff or 0.25 bolivar (bolivar, $0.193) plus 55 per cent surcharge per kilogram.

### COINAGE OF GOLD AND SILVER MONEY.

President Gomez, of Venezuela, has issued a decree ordering a new coinage of gold and silver money, as follows: Gold—1,000,000 bolivares in 20-bolivar pieces; silver—2,000,000 bolivares in 5-bolivar pieces; 500,000 bolivares in 2-bolivar pieces, and 500,000 bolivares in 1-bolivar pieces.

### COAL CONCESSION.

The Government of Venezuela has granted Mr. Hector Pardo a concession for thirty years to exploit the coal deposits, already discovered or that may be discovered within two years, in the States Falcon and Anzoategui.

### PARCELS-POST MOVEMENT.

The General Bureau of Statistics of Venezuela states that during the first half of 1910 the movement of the parcels-post service was 13,804 parcels, weighing 47,747 kilograms. The revenue derived therefrom was 247,841.66 bolivares.

### CACAO EXPORTS FROM CARUPANO.

During the year 1910 the exports of cacao from Carupano, Venezuela, amounted to 73,650 sacks, equivalent to 4,545,627 kilograms.

### MARACAIBO NOTES.

Ralph J. Totten, the United States Consul at Maracaibo, submits the following information on the progress and development of his consular district. He states that the new electric-light plant for the city of Valera has been installed and will commence operating in March. All machinery, engines, dynamos, and lights have been purchased in the United States.

A contract has been submitted to the city council for the construction of two electric tram lines for the city of Maracaibo and suburbs. At the present time transportation is handled by three horse-car lines, one steam dummy line, and the regular street coaches.

The project for the canalization of the bar at the entrance of Lake Maracaibo, so as to allow the entrance of vessels up to 20 feet draft, is receiving considerable attention.

A party of naturalists from a Chicago, Illinois, museum are now in the interior of the State of Zulia collecting specimens of birds, mammals and insects. They report splendid success.

The reading room of the consulate at Maracaibo is becoming more and more popular with local business men. A large variety of newspapers, periodicals, and catalogues are constantly being received and are read by the visitors to the office.

INTERNATIONAL UNION OF AMERICAN REPUBLICS

# BULLETIN

OF THE

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SR. DON JOSÉ BATLLE Y ORDÓÑEZ,

Inaugurated President of the Republic of Uruguay March 1, 1911.

BULLETIN
OF THE PAN AMERICAN UNION

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THERE is possibly no man in the United States more talked about or more in the public eye to-day than the Hon. CHAMP CLARK, Member of Congress from the State of Missouri and Speaker of the new House of Representatives. He stands in the forefront of American statesmen, and therefore his interest in Latin American affairs is most gratifying. Not because of its personal tone, but because of its bearing upon the work of the Pan American Union, there is quoted below what Mr. CLARK said in the course of a recent interview with the distinguished newspaper correspondent, EDWARD MARSHALL, which appeared in the "New York Times," Sunday, March 26, 1911.

Incidentally, while we are on this subject (reciprocal trade relations), I should like to take the opportunity to say that JOHN BARRETT, Director General of the Pan American Union, is, in my judgment, doing a great work for this country. He is undoubtedly promoting friendly commercial relations with all the American Republics, and friendly relations will promote our trade relations. He is an enthusiast on the subject, and I am in favor of backing him up. Honest trade never hurt anybody yet and never will. For fifty years we have been systematically slapping our neighbors to the north and south in the face. Let us hope that day of idiocy has passed.

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COMMENT ON THE PAN AMERICAN COMMERCIAL CONFERENCE.

In the last issue of the MONTHLY BULLETIN, there were published a number of quotations from letters received commending the work of the Pan American Commercial Conference and of the Pan American Union itself. They were only a small part of the large number received. A few more are quoted below, and especial attention is called to the prominence of the firms whose representatives express their opinion:

Mr. JOHN HUGHES, general sales agent of the great "United States Steel Corporation," says:

We were greatly pleased and much benefited by the experience and interchange of opinions at the Conference. Our belief is that such meetings are very beneficial in promoting trade relations and better understanding with our neighbors in the countries comprising the Pan American Union.




From Book on Cuba, prepared by Leon J. Canova.

PRESIDENT AND VICE PRESIDENT OF CUBA AND CABINET.

Since the engraving was made Hon. Rafael M. Ortiz, Secretary of Agriculture, has been appointed Secretary of the Treasury to succeed Hon. Francisco P. Machado, retired. Secretary of Justice Hon. Emilio del Junco is transferred to Secretary of Agriculture, and Hon. Jesus Barraque has been named Secretary of Justice.

Mr. HENRY L. JONES, of the same company, says:

I wish to express my appreciation of the very thorough and businesslike manner in which this Conference was carried on. As you are aware I attended every session and found each of very great interest. I wish to take this opportunity of congratulating you, as the entire success of the Conference was, no doubt, due to the very able manner in which it was handled.

Mr. J. N. MATHEWS, assistant director of sales, "E. I. du Pont de Nemours Powder Company," Wilmington, Delaware, says:

I believe that unquestionably the Conference represented a very valuable contribution to the efforts which are being made to extend commerce between the United States and the Latin American Republics.

Mr. JOHN H. PATTERSON, president and general manager of "The National Cash Register Company," Dayton, Ohio, says:

Our Mr. I. S. BETTS is getting out, under Mr. DEEDS'S and my general direction, an account for our house organ of some of the things that especially attracted our attention.

It will express our opinion of the great success of the Pan American Conference better than we could say in any other way.

I was surprised at the ability which you showed in organizing to such a wonderful degree, a convention like you had. In the first place you brought together people who were most interested, and those who knew most about the subject. It was amazing to see the information which was given out.

Mr. DEEDS'S and my indorsement of the meeting was the fact that three of us stayed from start to finish, including the three daily sessions.

Mr. F. H. LEGGETT, foreign sales manager of the "Western Electric Company," 463 West Street, New York, says:

There is no doubt that the Conference was of great value and well worth the time and effort which attendance on the part of the delegates necessitated. It should be of great assistance to the merchants and manufacturers of our country in extending their Latin American connections, and in proving to the Latin American countries that as a country we are beginning to wake up to the possibilities of the trade which is ours if we will only go after it in the proper manner.

Mr. A. N. HARGROVE, of "The J. G. Brill Company," Philadelphia, Pennsylvania, says:

Taking into consideration the fact that the late Conference was the first of its kind and more or less of an experiment, it was an unqualified success.

Mr. ROBERT GEDDIS, assistant general sales agent of the "Jones and Laughlin Steel Company," Pittsburg, Pennsylvania, says:

I think that the experience and the information gained at the recent Conference was very valuable and will no doubt bear fruit later on.

Mr. CRISPIN OGLEBAY, president of "The Ferro Machine and Foundry Company," Cleveland, Ohio, says:

The Commercial Conference was in every way so successfully handled and extended to me so much valuable information that I can not criticize nor offer any ideas for its improvement.

Mr. F. E. Bloss, assistant secretary "American Car and Foundry Company," 165 Broadway, New York, says:

We believe that everyone who attended the Conference received many valuable helps.

Mr. Norman Dodge, second vice president of the "Mergenthaler Linotype Company," New York, says:

I take the opportunity of congratulating you upon the splendid way in which the Conference was handled. I am sure it was the general opinion of all the representatives present that the Conference was a great success, and that this was due largely to the manner in which it was conducted.

Mr. W. N. Dickinson, of "The Otis Elevator Company," 17 Battery Place, New York, says:

My frank impression of the recent Pan American Conference is that it was a complete success.

Mr. W. J. Marsden, export manager of "The Yale & Towne Manufacturing Company," 9 Murray Street, New York, says:

The meeting was extremely interesting, and gave opportunities to all of us to form many acquaintances in the same or widely different lines of business, which will no doubt be of value from time to time.

Mr. H. P. Rockwell, manager sales correspondence department, "Yawman & Erbe Manufacturing Company," Rochester, New York, says:

In my opinion the Pan American Conference was the most successful occasion of its kind I have ever attended, and, from what I have heard, I believe it was considered by others in attendance to be the most comprehensive gathering of commercial interests ever known in this country.

Mr. Clarence C. Fleming, of "Eberhard Faber," 37 Greenpoint Avenue, Brooklyn, New York, says:

In regard to the recent Pan American Commercial Conference, I would say that all of the various papers, speeches, and discussions deeply impressed me and were listened to with the greatest possible interest. I am sure that this was the experience of all who had the privilege of attending. The benefits can not be estimated.

I could not but be impressed with the splendid manner in which the Conference was conducted, and congratulations and thanks are certainly due you from all of the delegates for your success.

Mr. William Coffin, of "The United States Playing Card Company," Cincinnati, Ohio, says:

Continued thinking over the proceedings of the Conference has deepened my conviction that the amount of ground covered and the thoroughness with which every matter of general importance to those interested was gone into make the last Pan American Commercial Conference unique. It seems to me that any exporter or importer who did not attend has lost a great deal.

Mr. David H. Bellamore, of "The Mosler Safe Company," 373–375 Broadway, New York, says:

I take this opportunity of stating to you that my visit was most pleasant and profitable. The information I gathered at your meetings will be of particular help in my work.

Mr. A. T. SWEETSER, of the "W. L. Douglas Shoe Company," Brockton, Massachusetts, says:

If I were to express my opinion of the manner in which the business was carried on I would certainly say that it was a complete success in every respect, and I admired the snappy and business-like manner in which everything was conducted.

Mr. DONALD B. LOGAN, of the "Logan, Swift & Brigham Division, United States Envelope Company," Worcester, Massachusetts, says:

The results of such conferences must be far-reaching and of material benefit, not only to the business men of this country but to the country at large, because of their influence in furthering peace and friendly relations among the countries of Latin America.

Mr. PAUL R. MAHONY, of the export department "Remington Typewriter Company," New York, says:

I am glad to take this opportunity to tell you not only that I very much enjoyed the Conference and its associations, but that I feel that all those who attended, however great may be the measure of their experience, must have been fully repaid for the trip and the time spent at the meetings.

Mr. W. S. MEAD, "Lozier Motor Company," New York branch, says:

I beg to congratulate you on the success of your recent Pan American Congress, and can say frankly if the other gentlemen who attended the same secured the information that I did we were all well repaid for our visit to Washington, and several matters that were suggested during that Conference I have already put into practice in our foreign department; other information and data received at that time was also transmitted to our representative now traveling in South America, and I am sure that these will be of value to us.

Mr. L. KLOPMAN, treasurer of the "Eugene Dietzgen Company," 181 Monroe Street, Chicago, Illinois, says:

I assure you, on behalf of myself and my company, that we are in hearty accord with the work of your Bureau and appreciate the results obtained at the recent Conference held at your instigation, and fully value the information obtained by our presence, and will cooperate in any further efforts made along the same lines.

Mr. WILLIAM ALLAN DYER, vice president and general manager of "The Smith Premier Typewriter Company," Syracuse, New York, says:

I think and feel that you deserve great credit for the success of the meeting, and I hope it will be repeated and that I may have the privilege to attend the next one.

Mr. ELMER H. YOUNGMAN, editor of "The Bankers Magazine," 253 Broadway, New York, says:

I certainly want to congratulate you on the magnificent success of the Conference, for, in my judgment, nothing has been done heretofore that will tend so much to promote the growth of our commercial relations with Latin America. The Conference seems to have been admirably planned out and the program most successfully carried out. The Pan American Union has grown to be a most efficient instrumentality in promoting friendship and commerce between the United States and Latin America.

Mr. EDWARD A. FAUST, second vice president of the "Anheuser-Busch Brewing Association," St. Louis, Missouri, says:

I take great pleasure in stating that the few days I was present at the Conference I enjoyed and appreciated every moment of the time spent in the hall. The matter



DR. FRANCISCO BERTRAND, NEW PRESIDENT OF HONDURAS, ENTERING TEGUCIGALPA, THE CAPITAL, MARCH 25, 1911.

Dr. Bertrand is in the center on the white animal. On his right is Hon. Fenton R. McCreery, the United States Minister to Honduras, and on his left is Señor Don Mayor Zamorra, the Mexican Minister to Honduras.

presented there was instructive, and should be the means of increasing the trade with the South American Republics.

Mr. Wm. M. Benney, manager foreign department "National Association of Manufacturers," 30 Church Street, New York, writes again, saying:

I take pleasure in saying that I look upon it as a most notable event in our commercial history, and I believe that it will have considerable influence in encouraging manufacturers who have been looking into the possibilities of Latin American markets to increase their efforts to secure trade therein, and to stimulate interest in Latin American trade on the part of those who have so far given but little attention to the matter.

Mr. William Matson, president of "The Chamber of Commerce," of San Francisco, says:

The Chamber of Commerce of San Francisco desires to commend your efforts, as Director General of the Pan American Union, to promote closer and broader relations between the countries of North and South America. It is realized by this organization that to your good work is due much of the success of the recent Pan American Commercial Conference. The future of the Pan American Union will, in our opinion, be splendid, and its work will bring permanent results beneficial to all concerned.

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## THE CHANGE OF MEXICAN AMBASSADORS.

Since the last issue of the Bulletin appeared Señor Don Francisco León de la Barra, Ambassador of Mexico and member of the Governing Board, has been honored with the appointment of Minister of Foreign Affairs of Mexico, and is succeeded by Señor Don Manuel de Zamacona é Inclán, who comes to Washington from holding the post of Mexican Financial Agent in London. Señor de la Barra was one of the most popular members of the diplomatic corps in this capital and took a deep interest in the Pan American Union. He always made a special point of attending the meetings of the Governing Board and otherwise doing what he could to promote the prosperity of this institution, and the Pan American Union is assured of having in him a good friend at the head of the Foreign Office of Mexico. The new Ambassador and member of the Governing Board stands high in the official service of his country, and the Director General and staff of the Pan American Union extend to him a most hearty welcome in assuming his present duties.

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## NEW MEMBERS OF THE GOVERNING BOARD.

The Pan American Union extends a hearty welcome to two new members of its Governing Board who have just arrived, Señor Doctor Antonio Martín Rivero, Minister of Cuba, and Señor Don Rómulo S. Naón, Minister of the Argentine Republic. Both of these gentlemen stand high in the official, social, and educational life of their countries, and will not only be important additions to the Diplomatic Corps of Washington but to the Governing Board of the Pan American Union. Señor Don



Photograph by Harris-Ewing.

SEÑOR DON FRANCISCO LEÓN DE LA BARRA,

Retiring Ambassador of Mexico to the United States, who has been honored with the portfolio of Minister of Foreign Affairs in the Cabinet of President Diaz, of Mexico.

JACINTO L. VILLEGAS, the recent Chargé d'Affaires of the Argentine Republic, who has gone from Washington to London as First Secretary of the Argentine Legation in the English capital, has left behind a host of friends who wish him success at his new post.

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### THE AMERICAN REPUBLICS TO ANDREW CARNEGIE.

It is a pleasure to announce that some time in May, before Mr. ANDREW CARNEGIE sails for Europe, the Governing Board of the Pan American Union will present to him, on behalf of the American Republics, the medal awarded him by the Fourth International American Conference which met at Buenos Aires in July and August, 1910. The Conference passed the following resolution:

RESOLUTION (August 4, 1910).

[Tribute to Mr. ANDREW CARNEGIE.]

The Fourth International American Conference, assembled at Buenos Aires, resolves:

First. The Fourth International American Conference declares that Mr. ANDREW CARNEGIE deserves the gratitude of the American Republics.

Second. The Union of the American Republics, on behalf of the Governments therein represented, shall have a gold medal struck bearing these inscriptions in English: On the obverse "The American Republics to ANDREW CARNEGIE," and on the reverse "Benefactor of Humanity."

Third. That the medal referred to in article 2 hereof, together with a copy of this resolution and of the documents thereto relating, shall be presented to Mr. ANDREW CARNEGIE at a special session of the Governing Board of the Union.

The following report shows the steps which have been taken to carry out the wishes of the Pan American Conference:

The Carnegie Medal Committee, consisting of the following members of the Governing Board: The Mexican Ambassador, and the Ministers of Costa Rica, Venezuela, Colombia, and Ecuador, appointed by the chairman of the Board pursuant to the recommendation of the Board at its meeting of November 14, 1910, in accordance with the resolution adopted by the Fourth Pan American Conference, begs to report as follows:

At a meeting held on December 17, 1910, at the Pan American Union Building, the committee unanimously voted to report that the following action be taken by the Board:

1. That $1,000 be advanced from the funds of the Pan American Union for the purchase of the medal described in the resolution, and for the fitting preparation of the resolution and the documents relating thereto to be presented to Mr. CARNEGIE at the same time with the medal.

2. That this sum of $1,000 be allotted among the different American Republics upon the same basis as their quotas, and that they be accordingly requested to reimburse the Union for this amount advanced.

3. That the Director General be authorized to invite three or more representative firms or artists to submit designs and bids for the medal, which shall in turn be submitted to this committee for final approval, and that the same action be taken in regard to the suitable preparation of the resolution.

4. That upon the final completion and delivery of the medal and the resolution to the committee, the Governing Board formally invite Mr. ANDREW CARNEGIE to come to Washington in order that they may be fittingly presented to him in the building of the Pan American Union erected through his generous cooperation.



Photograph by Harris-Ewing.

SEÑOR DON MANUEL DE ZAMACONA É INCLÁN,

The new Ambassador of Mexico to the United States.

In the competition which was held for the design of this medal, SALLY JAMES FARNHAM, who made the bronze friezes for the Governing Board room of the Pan American Union was successful, and the medal itself, which will have a diameter of $3^3/_5$ inches and will be made of 22 karat gold, is now in the process of execution by TIFFANY & CO., of New York.

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### A GREAT FRENCH PEACE ADVOCATE IN AMERICA.

Senator Baron D'ESTOURNELLES DE CONSTANT, the eminent French statesman and representative of France at The Hague Peace Conference, is to be congratulated on the practical work he is doing for the spread of peace sentiments among different nationalities. He is now in the United States, under the direction of the Carnegie Endowment for International Peace, and is making a number of addresses at important places throughout the country, going as far south as New Orleans and as far west as San Francisco. His visit to Washington was a notable one when there was assembled in the Hall of the Americas of the Pan American Union building a distinguished gathering, representing the official and social life of Washington, to hear what he had to say at this meeting. Baron D'ESTOURNELLES pleased everybody by speaking in English, and his command of that language was an illustration of the versatility of his ability. He is engaged in a propaganda of the highest importance, and we hope that he will return to France convinced that the peace spirit in the Western Hemisphere is spreading rapidly and that it will eventually result in the end of all wars in the American nations.

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### A NOTABLE CARTOON IN "PUCK."

That well-known illustrated weekly, "Puck," published in New York City, is to be congratulated on the cartoon which appears in the issue of March 29, occupying a double-page position. It represents the Pan American Union in the form of a vigorous man facing a body of business men who appear sleeping or to be making fun of his statements as he points to South America on a large map of the world. In the upper left-hand corner of the cartoon is a small reproduction of a famous picture of COLUMBUS being jeered and scoffed at when he first told the supposed wise men of Europe about the new world to the West. Underneath the cartoon is the wording:

"There is a Rich Land to the South"—The Pan American Mercury to the Yankee Manufacturers. They jeer and scoff at him now as others jeered and scoffed at COLUMBUS when he told them of a land to the West.

This cartoon is one of the best and most suggestive of any which has recently been done by that eminent artist, KEPPLER. It will do more good than hundreds of speeches or pages of editorials and magazine articles.



SEÑOR DOCTOR ANTONIO MARTÍN RIVERO,

The new Envoy Extraordinary and Minister Plenipotentiary of Cuba to the United States.

### AMBASSADOR BACON AND LATIN AMERICA.

Elsewhere in this number of the BULLETIN we have much pleasure in giving a translation of a speech which Hon. ROBERT BACON, the Ambassador of the United States to France, delivered at a luncheon given by him at the American embassy to the Latin American diplomatic representatives in Paris, and the response, in behalf of his colleagues, of Señor Don MANUEL M. DE PERALTA, the Minister of Costa Rica. In view of the interest which Mr. BACON has always taken in Latin American affairs and of the special attention which he gave to those countries while he was Assistant Secretary of State, these remarks have a particular value. In this connection, the Director General wishes to express the pleasure he enjoyed in welcoming Ambassador BACON on the occasion of a visit by him recently to the Pan American Building. It was the first time that Mr. BACON had the opportunity of seeing the structure following its completion. Inasmuch as he, along with Senator ROOT, while the latter was Secretary of State, took the deepest interest in the reorganization of the Pan American Union and in the construction of its new building, it was a privilege to show him about and let him see what was, in a sense, the fruition of his efforts in the past.

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### LATIN AMERICA'S VIEW OF THE COMMERCIAL CONFERENCE.

The Director General has received from Mr. ROBERT WOODS BLISS, the Chargé d'Affaires of the United States in Buenos Aires, an interesting package of press clippings from the principal papers of that city, showing the interest which was taken even there in the Pan American Commercial Conference held under the auspices of the Pan American Union in the week of February 13–18. "La Prensa" of February 23 had a long editorial aside from news notices on other days. The "Buenos Aires Herald," one of the principal English papers of the Argentine capital, had several news notices describing in part the proceedings of the gathering. In view of the high standing of "La Prensa," the following quotation is made from its editorial under the title "The Pan American Commercial Conference":

> The Pan American Commercial Conference which was recently held in the United States and at which there were delegates from a large number of associations and industrial houses was due to the constant labor of Mr. BARRETT, who has set himself the task, with laudable purpose, of making known the great elements of life and progress in the Latin American countries.
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> * * * * * * *
>
> Latin America is destined to be the market place of the world. The inexhaustible founts of riches which it possesses, scarcely begun to be exploited, show amazing results. With immigration encouraged, labor systematized, public order secured, all of which rests upon itself alone, the United States, without seeking to dislodge Europe, a thing which would be impossible, may to a great extent augment its mercantile and industrial influence on the continent.
>
> In order to accomplish this result it is only needed that its leading men, with that practical spirit which distinguishes them, take into account in this, as in other matters,



Photograph by Harris-Ewing.

SENATOR BARON D'ESTOURNELLES DE CONSTANT.

the fact that it is indispensable to proceed on the basis of a most complete equality, without pretense of superiority of race nor with inadmissible projects of political hegemony. * * * Just as the Argentine Republic so the United States has been benefited by the interest awakened and the need daily felt in Europe for commercial expansion. This interest has been progressive because in these countries has been found a larger field for action. By a like inevitable law must come a drawing together of the Latin peoples of this continent and the country, which has arrived at the point where it can commercially compete with the great producing States.

Mr. BARRETT and his coworkers, with a foresight worthy of all praise, propose to narrow the distances and shorten the road which must be followed.

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### THE PAMPHLET ON THE ARGENTINE TARIFF LAW.

The pamphlet recently issued by the Pan American Union, in its broad line of practical work, entitled, "The Argentine Tariff Law," has attracted wide attention among the business interests of the United States and other countries, and has been highly commended by all those who have inspected it or have had occasion to consult it. As this was prepared entirely under the direction and by the personal efforts of W. C. WELLS of the staff of the Pan American Union, he is to be congratulated upon the way the work has been received. Señor Don JACINTO L. VILLEGAS, the former Chargé d'Affaires of the Argentine Republic, who has just left Washington for his new post to London, in a note written to the Director General shortly before his departure, says:

> I wish to congratulate you on the noble pamphlet which you have prepared on the Argentine tariff law. It is undoubtedly a work very ably done and, believe me, as an Argentine citizen, I am very thankful to you for the service which has thus been rendered to my country.

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### PORTRAIT OF SENATOR ELIHU ROOT.

There has recently been hung upon the walls of the office of the Director General, in the new Pan American Building, a portrait of Senator ELIHU ROOT, which was painted by a young man named N. MOSES. It was executed after he had one view of Mr. ROOT and made a study of the Senator's photographs, and yet it is considered one of the best likenesses of this distinguished statesman which has been done by any portrait artist. Mr. MOSES is to be highly commended in this achievement.

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### W. NEWTON GULICK IN LATIN AMERICA.

Mr. W. NEWTON GULICK, one of the well-known young men of Washington, is now making an extended trip through South America, and has sent the Director General letters descriptive of his journeys and inclosing some interesting photographs. Mr. GULICK is writing a series of articles for the "Chicago Blade," which bring out many facts, not generally appreciated, in regard to the countries through which he is journeying. He has a keen eye for observation and emphasizes those features of life, development, and resources of the Republics to the south which are too little appreciated.

# CUBA'S NATIONAL EXPOSITION[a]

PRESIDENT GOMEZ opened Cuba's first National Exposition, at Havana, on February 5; it was officially closed on March 15, when announcement was made of the awards. The Exposition was thoroughly successful. The displays were typical and instructive, and the attendance was flattering, which means that at no excessive cost the Exposition served its purpose. advertising Cuba far and favorably.



(American Photo Co., Havana, Cuba.)

PAVILION OF THE CITY OF HAVANA.

Its grounds were the extensive gardens surrounding the old villa of the Mills, former home of captains general and of President PALMA, which, after he abandoned it for Camp Columbia, became a public school. The residence, forsaken by the school some time ago, was remodeled to become the central building of the Exposition; from the parked glorieta, laid out immediately before it as a center, other buildings especially constructed were arranged.

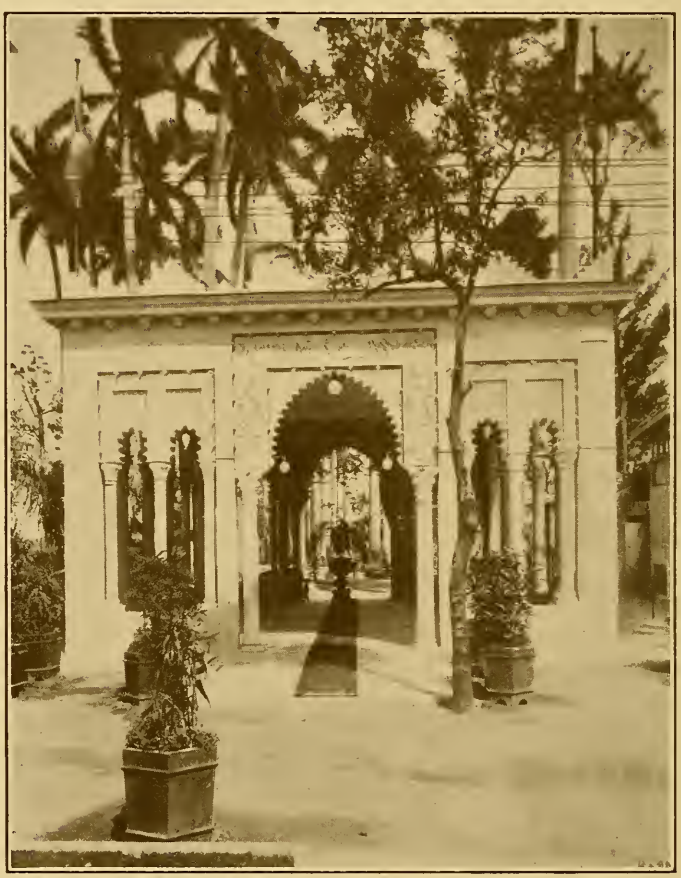
[a] By I. A. Wright, Editor, The Cuba Magazine.

The Exposition was easy of access from Havana since its grounds were on the outskirts of the city itself, directly on the Principe street car line, below Principe Hill, on slopes of which the tobacco mills were situated a century or so ago, from which the estate took its name, now seemingly so meaningless inasmuch as there are no mills of any kind nearer than Toledo sugar factory, miles away. From Carlos III boulevard, which the car tracks parallel, an avenue shaded by wide-branched trees led to the central glorieta; from there narrower paths bordered by foliage plants and blooming flowers invited further in every direction. This principal entrance avenue was arched by a light wood frame on which a myriad of electric lights were strung; other small globes were twisted through the overarching trees; still others encircled the slim white boles of certain very tall royal palms within the grounds, twinkling even high among their exalted tops. At night when the current was flashed on the effect was fairyland. One seemed to enter the Exposition by way of a miraculous walk of strange trees bearing crops of glowing golden and red fruits, or abloom with incandescent blossoms palely blue. Many a tourist who has seen far more pretentious expositions than Cuba's was heard to declare that he had not beheld anything like the unique beauty of these illuminations.

Another exceptionally happy feature was the accommodation made for the public's real comfort. There were seats everywhere, and among the handsomest buildings on the grounds were several pergolas constructed of cement, decorated with mosaic and tile on the exterior and painted in fantastic design and pastel colors on the interior, from which the sun was excluded by wide eaves of softly tinted glass. All these were provided with many easy chairs in attractive design, where the public was free to sit and rest, watching the parade of visitors, enjoying the illuminations, and listening to the band, situated in a stand quite like the pergolas in general appearance. The Municipal Building and the Provincial Building of Havana city and Province were really resting places, as was that representing the Province of Santa Clara. Nothing, undoubtedly, was more appreciated by crowds attending the exposition than the privilege of sitting quietly amid pleasant surroundings while considering what had been seen and planning what to see next.

In the principal building was displayed the exhibit brought together in representation of the women of Cuba. It was therefore distinctly a display of fancy work, especially laces, drawn work, and embroidery. To attempt to describe in detail this display would be to fail in an impossible task. There were countless bits of rare lace and numberless exquisite embroideries, to make which consumed time incomputable, patience beyond comprehension, and certainly exercised that genius which is the capacity to take infinite pains. Those regional societies which conduct schools; institutions which shelter poor

women and children; convents, all were represented, and also individual women had been prevailed upon to exhibit heirlooms and samples of their own work. There were laces yellowed with age and others as yet unfinished. Some were heavy with the weight of linen and silk employed; others were so delicate a spider inspecting them must have acknowledged his skill outdone in their cobwebby fineness. As combining good taste with fragile texture and a due degree of usefulness, the representative of THE BULLETIN recalls a collar done



(American Photo Co., Havana, Cuba.)

PAVILION OF THE PROVINCE OF SANTA CLARA.

by CONSUELO PAYROL Y DEL SOL, a table or lunch cloth by GLORIA OCHOA DE RIVERON, a handkerchief by JOSEFA DE STURGO, and a bedspread which was the work of Mrs. EMILIA SOLBERG.

In a wing of this same building was the art exhibit, among the paintings being one by QUIÑONES, remembered longer for its "literary" value (the story it set forth) than for its artistic worth, which was nevertheless considerable; a night study of a child asleep, by J. ALBAIJES; a number of studies in still life by ELVIRA DE MELERO;

and at least one good canvas (a child's funeral at nightfall in a poor village), by RODRIGUEZ MOREY. Upstairs in this same building there was, among other things, some excellent caricature work. some of the drawings were too old in date to be intelligible to the average visitor, but J. VAIL'S funny yet kindly portrayals of TAFT and of ROOSEVELT were highly enjoyable.

In the Agricultural Building were excellent exhibits of citrus fruit from Holguin (assembled by THOMAS R. TOWNS), from Bartle, Ba-



(American Photo Co., Havana, Cuba.)

BUILDING OF THE PROVINCE OF HAVANA.

yate, La Gloria, Ceballos, the Isle of Pines, and from Herradura and Taco Taco (ORR BROTHERS), in Pinar del Rio Province. The exhibits set forth the fact that culture of citrus fruits here is entirely the business of American and Canadian and other British settlers. Similarly, these colonies showed the handsomest vegetables—WILLIAM P. LADD, Santiago de las Vegas; FULTON MABS, Mr. COLLINS, and others, at Herradura; Messrs. GILTNER, DURHAM, MCCULLOUGH, and others, still from the Isle of Pines; but two Cubans exhibited accomplish-

ments equal to the best of theirs. ROMAULDO POLANCA sent in magnificent eggplant, and no cabbages or cauliflower surpassed JOSE ROCHER'S, from Pinar del Rio City. The best and biggest pineapples came from the Isle of Pines (notably J. A. MILLER'S). That isle showed potatoes, a crop which yields "real money" in profits.

In this same room there were most instructive exhibits of miscellaneous articles. For instance, a single estate, El Cedral, ABELARDO PORTELA, owner, which is near Trinidad, showed five varieties of rice, grown there; starch from *yuca*, vinegar from the *parra cimarrona*, coffee, corn, and cords from six different varieties of fiber plants, shrubs, and trees. As a demonstration of what a Cuban can do by way of making the most of advantages natural to his immediate surroundings, that one little exhibit was perhaps unsurpassed in the Exposition entire.

There were at the Exposition at least two notable exhibits of cordage; one was made by RAFFLOER, ERBSLOH & CO., New York, whose factory is at Regla (the hemp used is grown near Matanzas); and another by ROBAU VDA. DE GRUART, who uses the fiber of the *majagua* tree, putting it through a machine patented by PEDRO HERNANDEZ ALEMAN, which turns out a smooth, even, durable, handsome article.

JUAN RIPOLL exhibited seven varieties of fiber plant—the agave and others that looked like close relatives—along with their products, including an excellent imitation of human hair, which was shown dyed and elaborately coiffured. MATEO RODRIGUEZ, from Bartle, showed bales of *guana*, the inside bark of a tree, first grade of which is sent to Europe to be made into leghorn hats; the two less perfect grades are used here, stripped into ribbons, as twine is used elsewhere.

There were very handsome exhibits of hardwoods. MOFFIT ROBINS & CO., the local chamber of commerce, RODRIGUEZ & ANGEL, and and others, notably the Government's Department of Forestry and Mines, showed too many woods to name, various in grain and color, all susceptible of high polish and desirable for uses varying from heavy construction work to cabinet work of the finest sort. RODRIGUEZ & ANGEL sent into the Exposition two immense logs—one of mahogany and one of cedar.

The exhibit of minerals was assuredly enlightening, particularly that especially prepared for Pinar del Rio, a province not generally known for its mineral resources. Yet here were shown iron ores from the region around Mantua, where, according to a placard, a million tons of the same, averaging 50 per cent metallic iron, are in sight, and extra fine sand suitable for cement, polished blocks of black and white marble, asphalt and mineral tar, copper from the Viñales district, and some coal. In the same and an adjoining room were suggestive mineral displays from Oriente, iron from Firmeza, Daiquiri

and Woodfred, where they consider 50 per cent metallic iron below average and mine nothing under 48 per cent; manganese from the Ponupo mines; gold from Holguin; copper from Cobre and the Bayamo group; and mineral tar, which along with asphalt, is found in every part of the island.

Immediately in front of the Agricultural Building were the stables, the kennels, and the coops and cages where live stock and dogs and poultry were shown. The poultry exhibit was excellent, H. PRICE WILLIAMS showing some remarkable pigeons, Miss STORMS, of Herradura, some handsome barred Plymouths, and OCAMPOS and SANFORD some Rhode Island Reds that captured honors easily.



(American Photo Co., Havana, Cuba.)

LA CUBANA'S PERGOLA.

There were many displays of cement work, tiles, bricks, and mosaics. The HUSTON COMPANY showed pipe of the Meriweather patent such as is being used in the sewering of Havana. La Cubana (Mario Rotillant) had to its credit, throughout the grounds, some most effective work in mosaic and fancy tiling; the pergola, which was this company's advertisement, would have attracted attention at any world's fair because of the beauty of its design and detail.

VILLAPLANA GUERRERO & CO. showed their products (biscuits, bonbons, preserved native fruits, refined sugar, manufactured chocolates, etc.) to advantage. The German Kali Works had a booth showing, by way of photographs, charts, etc., the advisability of fertilizing soil from which maximum crops are wanted.

There was a building given over to exhibits of manufactured tobacco. It was carpeted and dimly lighted by way of a stained glass window the design of which is the trade-mark of the famous "Romeo and Juliet" brand. The cases and boxes and little booths in which the cigars and cigarettes were shown exhaled fragrance of Spanish cedar which, commingled with the perfume of "genuine Vuelta Abajo," made the place smell as though a censer had recently been swung there. It was amusing to observe how, unconsciously impressed by the hushing of their footfalls on the carpet and the "dim religious light" from the single handsome window, visitors lowered their voices on entering here as though the room had been a sanctuary—to the Goddess Nicotine.




(American Photo Co., Havana, Cuba.)

EXHIBIT OF VILLAPLANA GUERRERO & CO.

In a small building the Agrarian League (which, despite its name, is an association of sugar planters) exhibited sugar and the by-products of its manufacture. On the walls were photographs of famous mills. Here, too, was a bag of sugar, standard export size, marked with a card stating that last season Cuba sent to market 12,630,441 just like it; and here, attracting curious regard, was a block of desiccated sugar-cane pulp, prepared after the new process now being tried out at Preston. A card informed the public that one-half its content is sugar. It is proposed to desiccate cane here in the island, ship it to market in such blocks (avoiding heavy duty), and manufacture it there into sugar, and the bagasse into white paper, which, it is claimed, can be obtained by this process as it can not from any other.

The public schools of Cuba had a building among exhibits in which the sloyd work was notable, as were the physiological charts and the maps. There were albums showing the English work.

Beyond this was a corner of the grounds given over to amusements of which the directors approved. Among them were merry-go-rounds, miniature trains, shows where Spanish and Cuban dancing were the features, and many attractive refreshment booths.

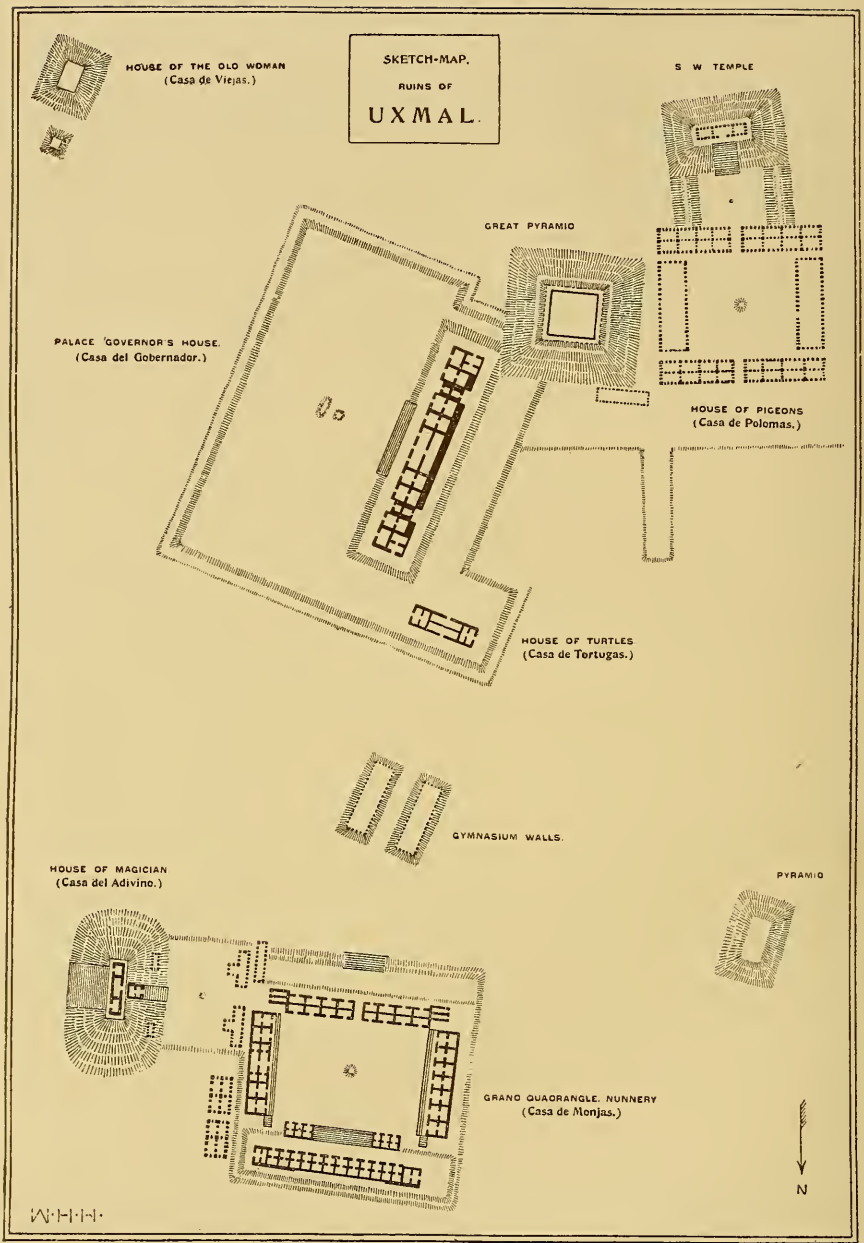
# ANCIENT TEMPLES AND CITIES OF THE NEW WORLD[a]

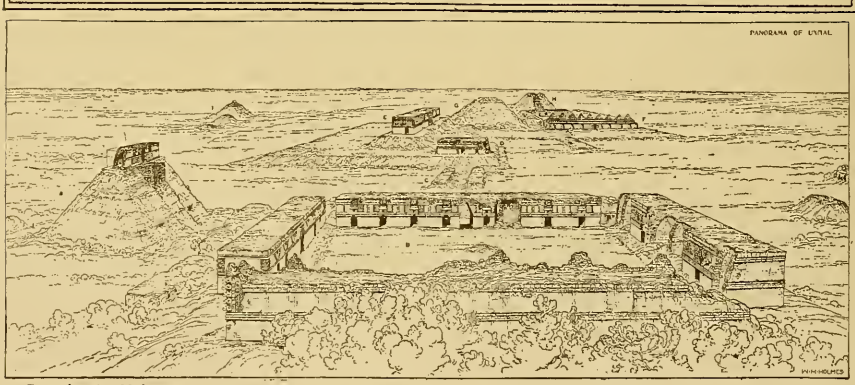
## UXMAL, THE CITY OF THE XIUS.

THE second city in point of size and importance in ancient Yucatan was Uxmal, the capital of the Xiu or Tutul Xiu family, who ruled there almost down to the time of the Spanish conquest. This city is located in the midst of a low range of hills, which crosses the State of Yucatan from east to west, and is about 100 miles from Chichen Itza, already described in a previous issue of this magazine. The derivation of the name Uxmal or Oxmal, as some of the early historians wrote it, is rather obscure. "Ox" is the Maya word for three, and "Mal" in the same language means to pass; "to pass thrice," therefore, would seem to be the meaning of the word, though why the Tutul Xiu should have applied this name to their capital is unknown.

Concerning the foundation of Uxmal, the following tradition is related by DIEGO DE LANDA, the second bishop of Yucatan, who wrote in the first generation after the conquest, and who claims to have gathered his information from natives well versed in the former history of their country: After the discovery and occupation of Chichen Itza, which seems to have been the first place of any importance to be settled in Yucatan, cities sprang up everywhere, and there followed an era of great prosperity. How long these different cities lived at peace with one another we are not told, but in time dissensions arose, and quarrels became so frequent that the different lords of the country found it necessary to take some concerted action in order to suppress violence and to restore order and peace. It was then decided to build a joint capital, where all those in authority should reside, and from which each one agreed to administer the affairs of his own particular domain. Without loss of time these plans were carried out. A joint capital was built in a new and unoccupied region, and was called "Mayapan," meaning "the standard of the Mayas." Thither all the lords assembled and as the final step in the formation of the new confederacy, an overlord, one COCOM, was elected and duly installed in the new capital as the supreme ruler. These cucuts laid the foundation for an era of prosperity, which endured for many

[a] By Sylvanus G. Morley.




Drawing by Holmes.

MAP AND PANORAMA OF THE RUINS OF UXMAL, YUCATAN.

years. Later, after an interval not specified by LANDA in his history, there entered the country from the south an alien people under the leadership of their chief, TUTUL XIU. The newcomers, previous to their arrival, had wandered for 40 years in the wilderness without water other than that which had fallen from the skies. This coincidence of a "40-years' wandering in the wilderness" is sufficiently striking to arouse the suspicion that the worthy bishop, in this part of his narrative, has been at some pains to force a pious coincidence




MAP OF YUCATAN SHOWING LOCATION OF RUINS OF UXMAL.

Uxmal is about 50 miles southwest of Merida, the capital of Yucatan, and can be reached from that point by rail (34.72 miles) to Muna, and by coach (15 miles) to the ruins.

with a similar episode in the Old Testament. Immediately after their arrival, the wanderers began building in the mountains not 30 miles distant from the capital a new home for themselves, which they called Uxmal. Far from being angered, however, by this appropriation of his territory so near at hand, COCOM, the ruler of the Mayapan, welcomed TUTUL XIU and his people, and entered into an alliance with them. LANDA thus describes the event:

The people of Mayapan formed a great friendship with the Tutul Xiu, rejoicing to see that they cultivated the land like themselves. In this manner the Tutul Xiu

became subject to the laws of Mayapan, and allied themselves with the older inhabitants of the country, and their lord was highly esteemed by all.

Judging from its size and magnificence the Xiu capital must have played a very important rôle in the history of Yucatan before the Spanish conquest. Indeed, LANDA says as much.

After a time, we are told, the supreme power held by the Cocom family seems to have turned their heads. They became successively more and more oppressive, each striving to outdo his predecessors in acts of tyranny and violence. However, there came a day at last when the other chiefs of the confederacy could no longer endure this despotic rule, and a conspiracy was hatched to overthrow the oppressor. With one accord, the conspirators turned to the then Lord of Uxmal, a descendent of the original TUTUL XIU, who had founded the city, as the natural leader in this movement for liberty, in spite of the fact that he was of foreign descent. He is described as having been a true friend of the public weal, as his ancestors before him, all of whom had held resolutely aloof from the tyrannies of the Cocom family. On an appointed day the conspirators, led by the Lord of Uxmal, met at Mayapan, and entering the palace of COCOM slew him and all his progeny, save one son only, who happened to be absent from the city at the time on a mission to a distant province. After this sanguinary reprisal, which avenged at one blow the oppressions of many years, the property of the dead ruler was seized and divided among his murderers, and the capital was destroyed. Whereupon each chief departed into his own country once more and the confederacy was dissolved. After the destruction of Mayapan, the Tutul Xiu abandoned Uxmal and founded a new capital some 30 miles distant which they called "Mani," meaning in Maya "it is passed," emphasizing by this name that the old order was over. These events occurred about the middle of the fifteenth century, or some 70 years before the Spanish first landed in Yucatan; but even after the conquest, the Xius in their new home continued to exercise considerable authority over the natives, and their friendly attitude toward the Spanish greatly facilitated the final pacification of the country.

The ruins of Uxmal are best reached to-day by stage from the little town of Muna, the nearest railroad station. A 10-mile drive from the latter place brings one to the hacienda of Uxmal, from which the ruins are about a mile and a half distant. The first view of the ancient city is to be had from the top of a hill just behind the plantation house. Across the plain a dozen or more imposing structures of white limestone may be seen rising above the dense vegetation which here enshrouds the countryside. Beyond, in the distance, a ragged chain of low mountains cuts across the horizon, each succeeding ridge a deeper blue. But one does not dwell long on the beauties of nature at Uxmal; the habitations of a bygone race claim the attention.



Partial restoration by Holmes.

MODEL OF THE GOVERNOR'S PALACE IN THE NATIONAL MUSEUM, WASHINGTON, D. C.

This building is regarded as having been the most important single structure of its class in America. Simple in plan and outline, it was imposing in appearance and size, being 325 feet long, 39 feet wide, and 25 feet high.



Photograph from W. P. Young, Progreso, Mexico.

VIEW OF THE EAST FAÇADE OF THE GOVERNOR'S PALACE.

This border zone, about 10 feet wide, is most handsomely and elaborately carved and adorned with twined fillet molding and ornate snouted masks. The broad space below is filled with bold fretwork, interrupted by the wonderful over-door trophy, the central feature of which is life size human figure, sculptured in the round and seated in a niche with festooned base. The head was surmounted by an elaborate and colossal headdress, most of which remains.

Descending the hill again, one takes the road which leads through the bush. The distant temples and palaces sink below the tree tops and for aught that one sees of them they might as well be on the other side of the world. After a half hour's walk, during which the ruins never once reappear, the road suddenly makes a sharp turn to the right, and just in front of one apparently blocking the way, there rises a lofty pyramid, the highest structure in the city.

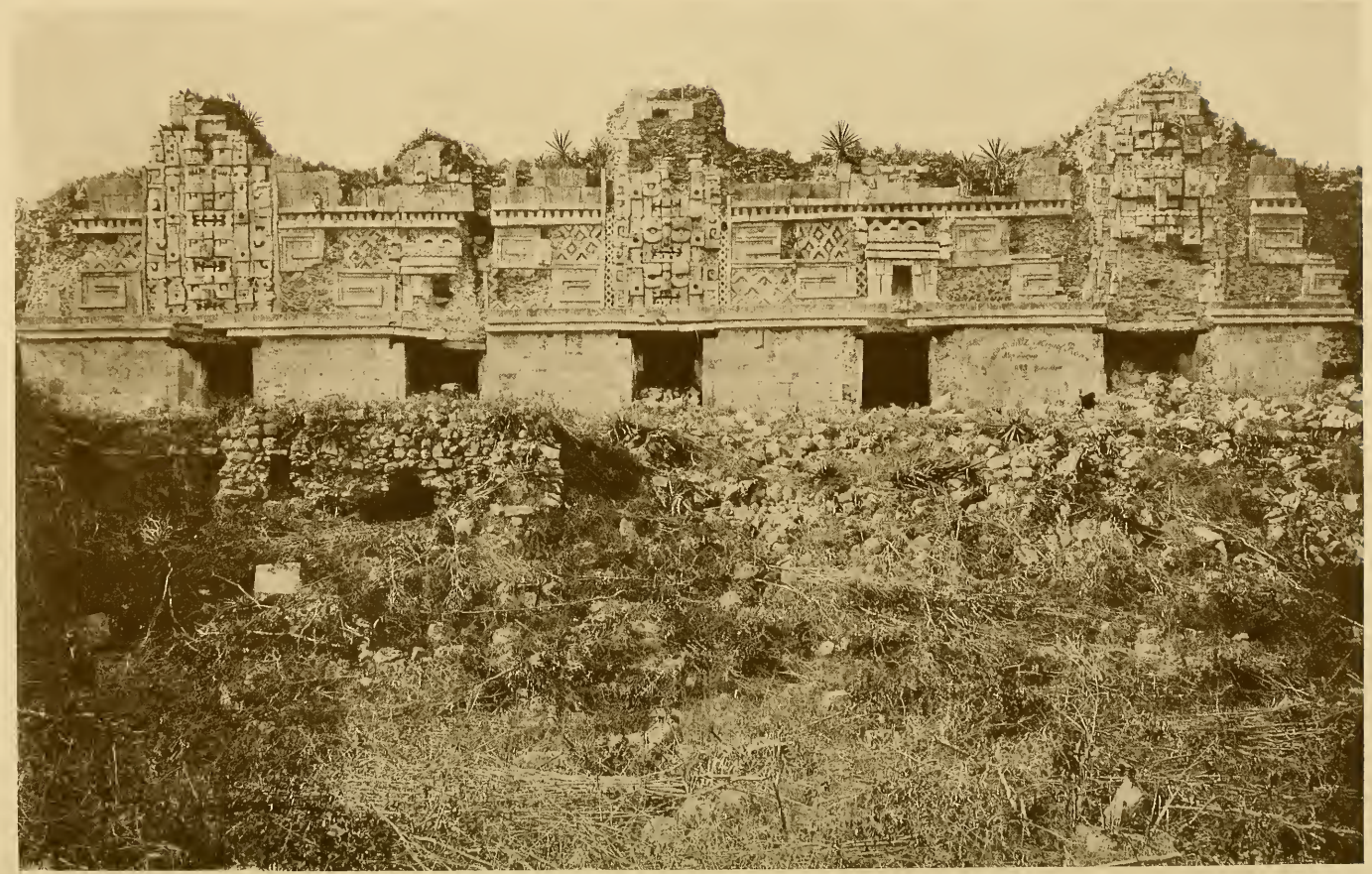
The splendid temple surmounting this, grotesquely called the House of the Dwarf or Magician, probably was the chief sanctuary of Uxmal. The pyramid on which it stands is over 80 feet high and covers nearly an acre of ground. The summit is reached by a steep stairway on its east and apparently back side. The temple, however, faces in the opposite direction, or toward the Monja's Quadrangle, an adjacent group of structures, with which, as we presently shall see, it was closely connected. Clear down into Spanish times, long after Uxmal had been abandoned by her native rulers, this temple was held in particular veneration by the Indians. About a century after the conquest, Father Cogolludo, provincial of Yucatan, visited Uxmal and climbed to the summit of this pyramid. He found there, he says, in one of the apartments offerings of cacao and the remains of copal,[a] burned but a short time before. This he thought indicated that some superstition or idolatry had been committed here recently by the Indians of the locality. And again, slightly later in 1673, a petition addressed to the King of Spain says—

> That the Indians in those places (Uxmal) are worshipping the devil in the ancient buildings which are there, having in them their idols, to which they burn copal and perform other detestable sacrifices.

Long after the conquest, no doubt, the natives continued to practice in secret their ancient rites and ceremonies, particularly at those places which formerly had been sacred or holy to them. It was to some such survivals of the ancient ceremonial and ritual that the above citations probably refer.

The Monjas Quadrangle, mentioned above as being adjacent to the House of the Dwarf, is, in fact, separated from it only by a small court. The four low massive buildings, of which it is composed, are built around the sides of a square, and, with the exception of the house on the south side, all stand on low platforms or terraces reached by broad stairways extending across their fronts. The rooms of this group, of which there are upward of 100, are entered for the most part by doorways opening onto the terraces which surround the court. A few, however, in the South House open exteriorly with reference to the group. This same side of the quadrangle is further differentiated from the other three, by the presence of an arcade passing

[a] Copal is a resin which burns with a dense smoke and a pleasant aromatic odor. It was used as incense by the ancient Mayas.



Photograph from W. P. Young, Progreso, Mexico.

FAÇADE OF BUILDING, NORTH SIDE, QUADRANGLE OF THE NUNNERY.

This side is notable for its elaborate false front covered with sculpture and rising in a dozen or more pinnacles or gables of varying height. The same conventional serpent occurs in pairs and in varied forms in roof decorations of the over-doors here.

through the middle, which leads from the court to the outside. This passageway doubtless was the main entrance to the group in ancient times, and establishes the direction from which it was approached. The four houses of the Monjas Quadrangle differ very greatly in their character, and probably in their function as well, from the House of the Dwarf near by. The buildings of the former stand upon low platforms and have many rooms. The latter on the other hand surmounts a lofty pyramid and only has three rooms. The first because of the greater number and accessibility of its chambers is better fitted for use as a dwelling place for a body of priests than the second. The second because of its commanding elevation and fewer chambers is better adapted for use as a place of worship than the first. The close connection between the two types so different and yet so complementary strongly indicates that the priests, who officiated in the service of the god to whom the House of the Dwarf was consecrated, lived in the rooms of the Monjas Quadrangle. The two groups, the lofty pyramid temple and the low multi-celled monastery together form a well-balanced combination.

Passing out through the arcade of the South House and leaving the Monjas Quadrangle behind, one descends by three terraces, partly artificial and partly natural, to the level of the plain. A few paces to the south may be seen two large parallel walls, 70 feet apart, each 128 feet wide, 30 feet thick, and about 20 feet high. These two constructions are the sides of the Uxmal ball court [a]—the ends being open. In the center of each at ends directly opposite there had been fastened originally a great stone ring 4 feet in diameter. Both of these, however, are now broken, and lie in fragments at the bases of their respective walls.

Beyond the ball court there is a high terrace or platform, covering over 3 acres of ground, and rising 23 feet above the plain. This supports a second and smaller terrace, 19 feet high, from which rises the so-called governor's palace—the most magnificent example of ancient American architecture extant to-day.

This palace, for such it is in every sense of the word, faces east, and, by reason of its elevation, forty-odd feet above the plain, commands an extensive view of the city. It is 325 feet long, 39 feet wide, and 25 feet high. The exterior walls are decorated with an elaborate sculptural mosaic, in the making of which it is estimated upward of 20,000 sculptured pieces of stone, weighing as high as 100 pounds, were used. The background of this elaborate mosaic is a lattice pattern, upon which the other decorative elements present appear to be overlaid. In reality these simply project from the wall farther than the lattice pattern, though the deception has been executed so cleverly that the effect is that of appliqué.

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[a] For a more detailed description of an ancient Maya ball court, see the previous issue of this magazine, "Chichen Itza, the Holy City of the Itzas," page 452.

This building is divided into three parts, a large middle section and two smaller ends, by two arcades passing clear through, after the manner of the arcade in the House of the Monjas Quadrangle already described. For some unknown reason these arcades seem to have fallen into disuse as passages before the city was abandoned, since they are now blocked up and each one converted into two

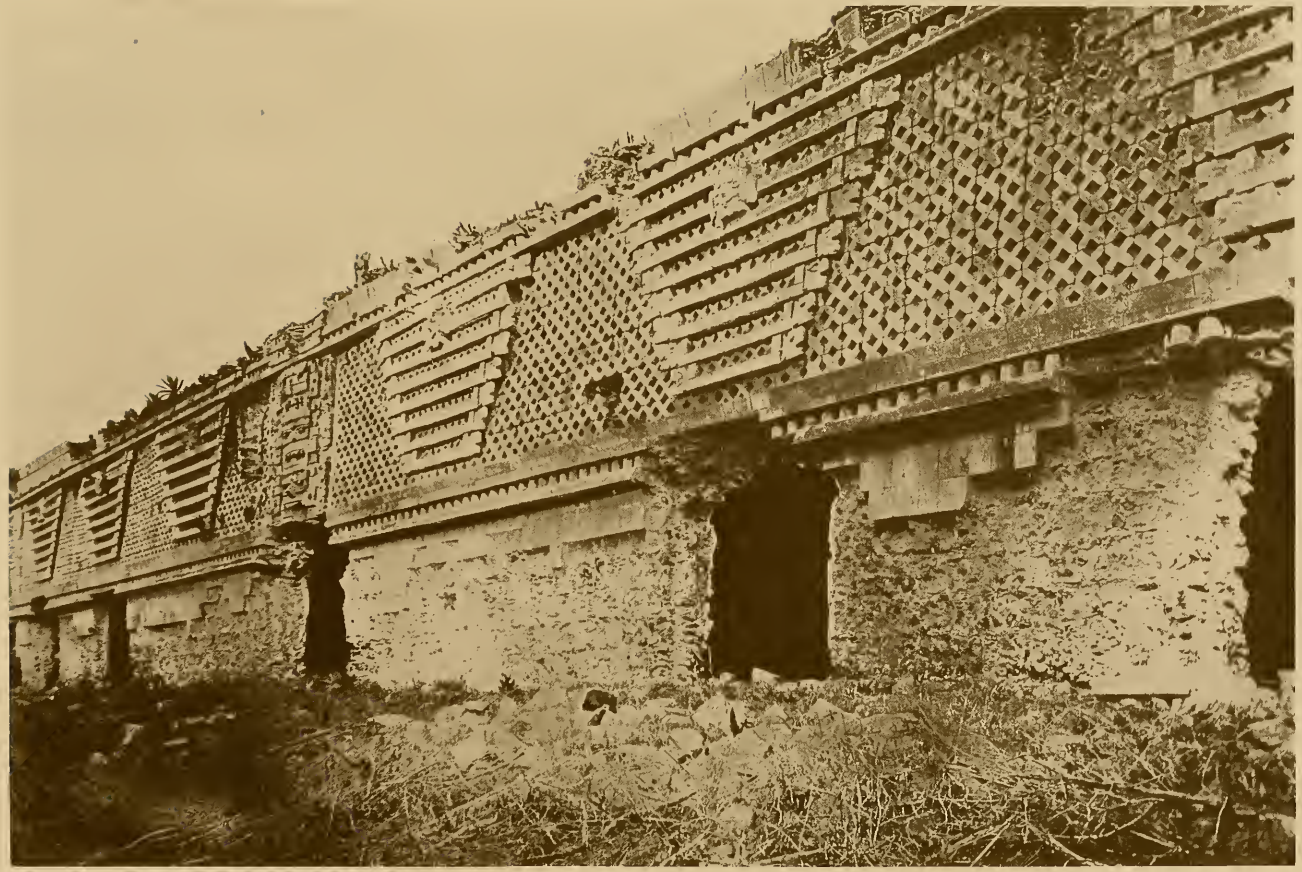


Peabody Museum collection.

TRIANGULAR ARCH, WEST FAÇADE OF THE GOVERNOR'S PALACE.

At the angles of these arched gateways are hideous masks, one over the other, the projecting trunk being in the place of the nose. Ornaments are carved on either sideof the arch, while the cable or rope decoration is also used. These gateways are no less remarkable for their novelty of design than for their beautiful workmanship.

small rooms. Including these 4 smaller rooms of later construction, the governor's palace contains 24 chambers—2 being entered from the east, 2 from the north, 2 from the south, and the remaining 18 by 13 doorways in the eastern wall, a single doorway in some cases giving access to a pair of rooms, one directly behind the other. The middle pair of rooms are the two largest in the entire building, being 60 feet long and 12 feet wide. By reason of their size and



Photograph from W. P. Young, Progreso, Mexico.

FAÇADE OF BUILDING, EAST SIDE, QUADRANGLE OF THE NUNNERY.

The chief adornment of this side are the four over-door V-shaped ornaments, each consisting of eight horizontally placed, two-headed serpents with bar-like bodies, and against the top of which are colossal human heads.

central location they may have been the council chambers of the Tutul Xiu. In these very halls, perhaps, may have occurred that episode described by LANDA, wherein one of the Lords of Uxmal condemned his own brother to be stoned to death for having violated a maiden, the prescribed punishment of which was death.

Behind the governor's palace, and on the tower of its two terraces, is the so-called House of the Turtles. This structure is characterized by a simplicity in its decoration, rather unusual in Maya architecture. The lower half of the façade is plain. The upper half consists of a continuous row of small columns, which appear to support the cornice, though in reality they serve no structural purpose whatsoever, being purely ornamental. At regular intervals along this cornice are sculptured the turtles, which have given to the building its name, though their significance is unknown. The House of the Turtles overlooks and faces the southern end of the ball court with which for this reason it may have been associated in some way. It is one of the multiple-room type of structures, having 7 chambers, and probably was used as a dwelling place rather than a sanctuary.

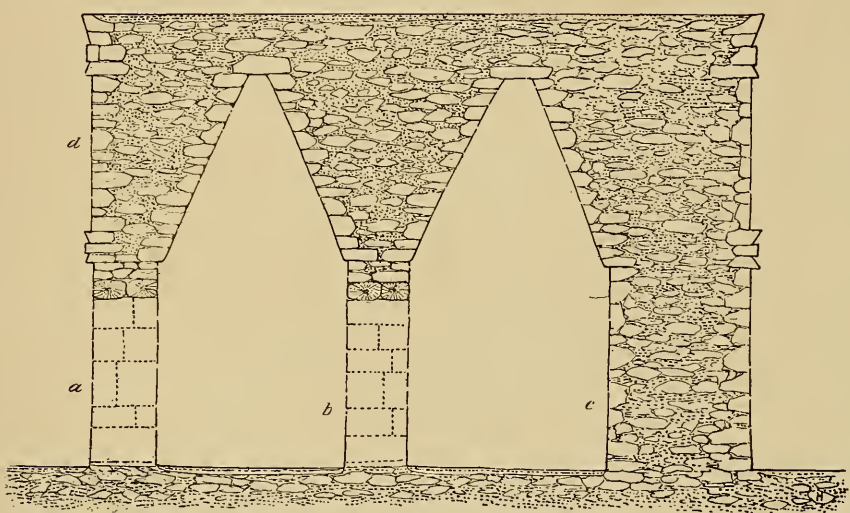
Another very important building at Uxmal is the House of the Pigeons,[a] so named because of the fancied resemblance of its roof crest to a dovecot. This roof crest or wall, for such it really is, runs along the entire length of the building. It is composed of 9 triangular-shaped projections, each rising some 15 feet or more above the level of the roof. These are perforated with many rectangular openings, and the rather far-fetched resemblance of the whole thing to a row of dovecots has given rise to the name House of the Pigeons by which this building is now known.

The water supply at Uxmal must have presented a serious problem to the founders of the city. There are no *cenotes* here as at Chichen Itza, great natural reservoirs which afforded an inexhaustable supply of water to a well-nigh unlimited population. And as for surface waters, such as lakes, rivers, springs, and brooks, there are none to be found in the whole of northern Yucatan. Indeed, were it not for the heavy rains which fall almost daily for six months, June to December, the country would be as parched and devoid of vegetation as the Sahara Desert. Deprived of those natural sources of water upon which other peoples depend, the founders of Uxmal were compelled to devise some means of catching the rainwater as it fell and stowing it for use in the dry season when skies and earth were equally dry. How successfully they met and overcame this difficulty we can judge from the size of the city which grew up here.

About a mile west of the Monjas Quadrangle there are a series of depressions formed in part by low hills, which at the close of the rainy

[a] For a more detailed description of this structure as well as the whole groups of which it forms a part only see American Journal of Archaeology, new series, Vol. XIV (1910), No. 1 et seq.

season are filled with water. Later, toward the end of the dry season, the water becomes so low in some places that the remains of stone embankments and retaining walls may be seen. These partly natural and partly artificial reservoirs, or *aguadas*, as they are called, were the waterworks of the ancient city. The inhabitants took advantage of a series of natural depressions, which by the construction of stone embankments at the lowest places around the edges they converted into reservoirs of sufficient size, when filled, to supply the entire population with water throughout the dry season. These *aguadas* are quite extensive, and beginning about a mile west of the city stretch for some distance to the south.



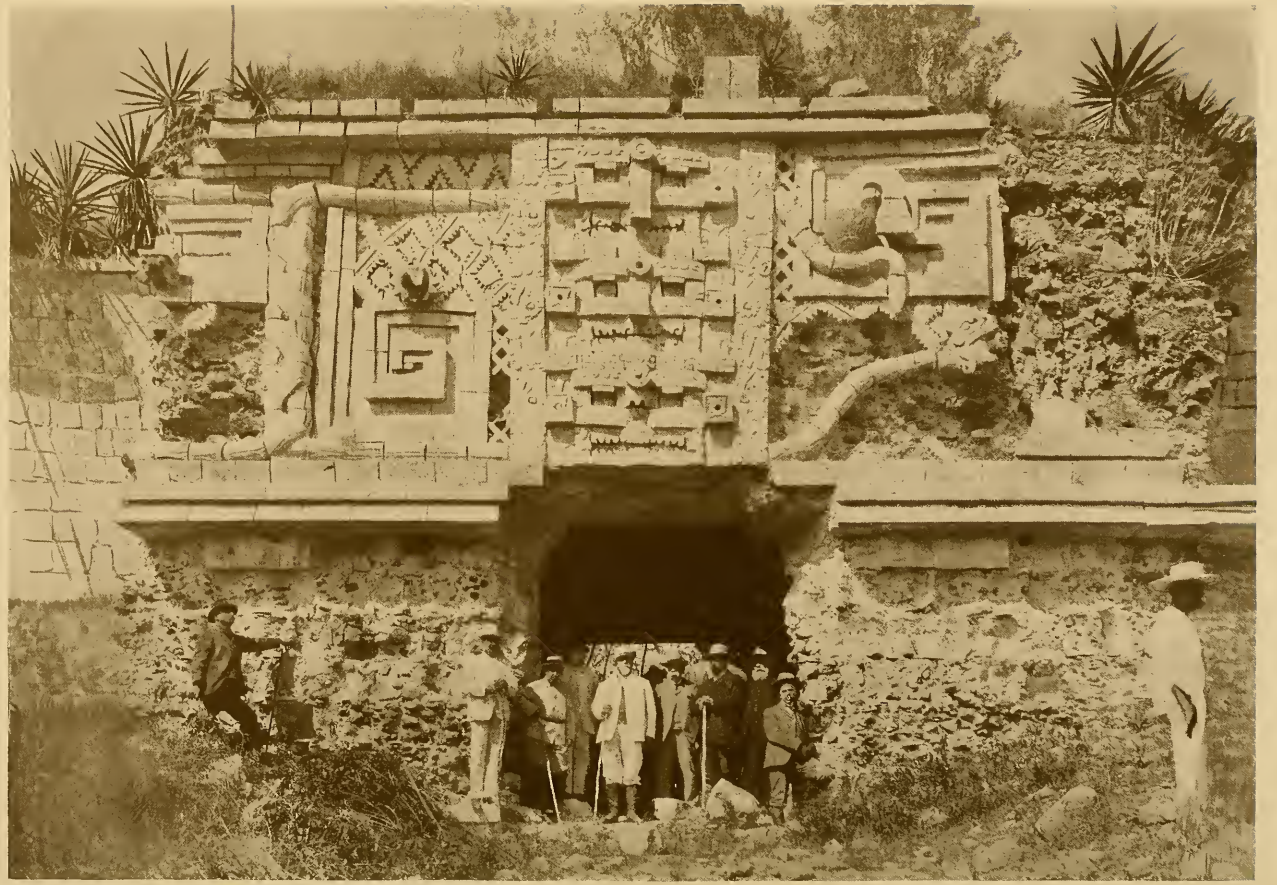

(Drawing by Holmes.)

TRANSVERSE SECTION OF GOVERNOR'S PALACE.

(*a*.) Outer doorway, wood lintels restored. (*b*.) Inner doorway. (*c*.) Back wall, 9 feet thick. (*d*.) Entablature zone containing rich decorations.

In addition to these large reservoirs, which doubtless supplied the whole city, the most important structures seem to have small subterranean cisterns associated with them. These are called *chultunes*,[a] and are located usually in courts or in terraces in front of the buildings. For example, the Monjas Quadrangle has several in its court. There are also several in front of the governor's palace, and several more in the court just south of the House of the Pigeons, and in fact they may be found throughout the city associated with the more important structures. These *chultunes* are usually about 15 feet deep and 15 to 20 feet in diameter at the bottom. The sides rise perpendicularly until near the top, where they slope sharply

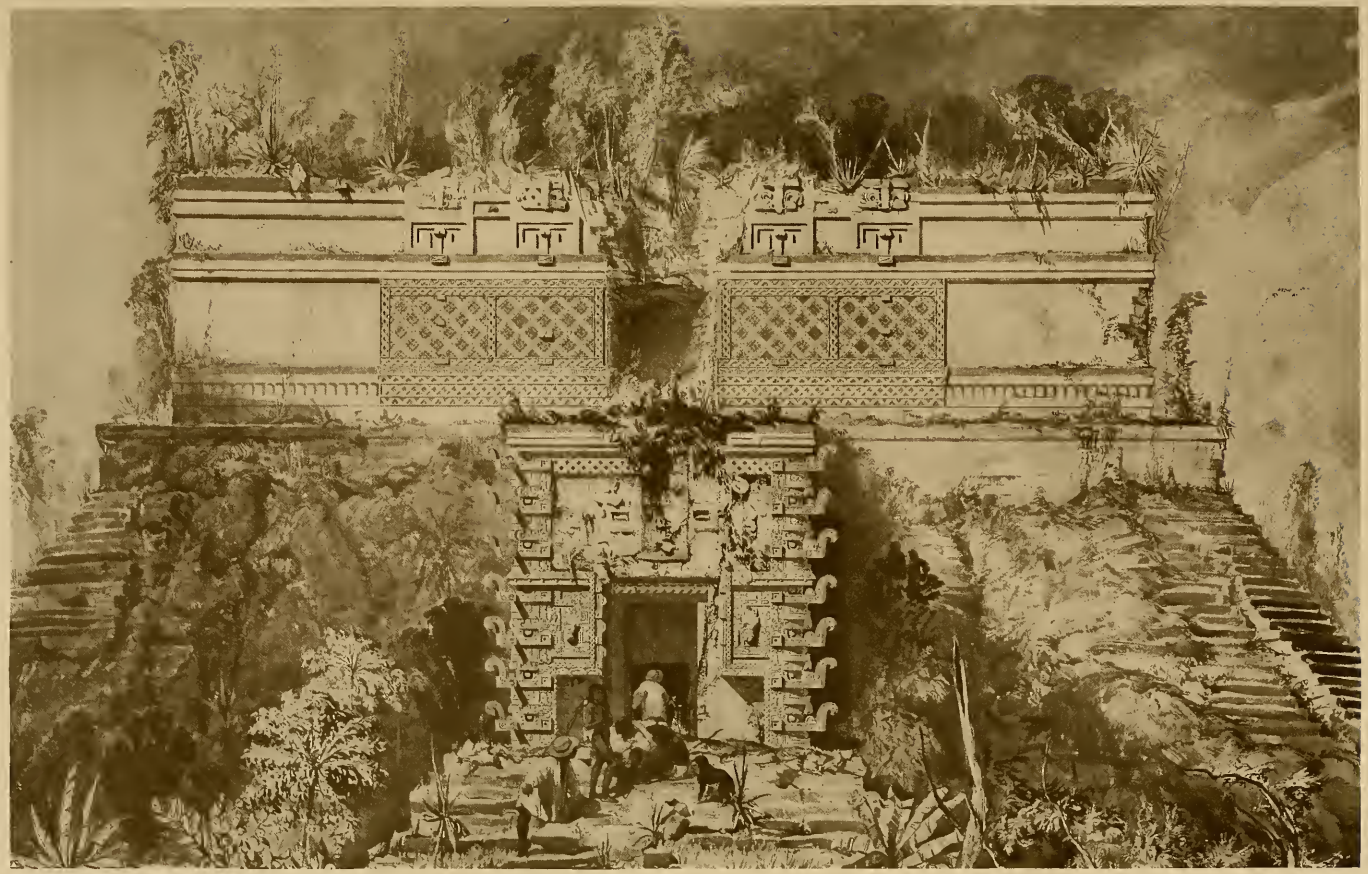
[a] For a detailed study of this class of remains, see Memoirs Peabody Museum American Archæology and Ethnology, Harvard University, Vol. I, No. 3. E. H. Thompson.



Photograph from W. P. Young, Progreso, Mexico.

PORTION OF FAÇADE OF BUILDING, WEST SIDE, QUADRANGLE OF THE NUNNERY (MONJAS).

The Nunnery (Monjas) consists of four rectangular structures, low and heavy in appearance, in quadrangular arrangement, with their ornate fronts facing inward upon the inclosed court. All these edifices have the walls plain and the entablature elaborately sculptured. Eight or ten distinct decorative elements are introduced in the embellishment of these buildings. The colossal feathered serpent and the snouted masks predominate on this side.



Drawing by Catherwood, 1844.

GATEWAY WITH ORNAMENTED SUPERSTRUCTURE OF THE GREAT TEOCALLIS—HOUSE OF THE DWARF (ALSO CALLED HOUSE OF THE MAGICIAN).

The gateway itself is a pyramidal mound, about 235 feet long, 155 feet wide, and, with the ornamented structure above it, towers to a height of 105 feet. The ornamentations are similar to those of the Governor's palace but more delicately wrought. The section above the gateway represents a design different from that of the other buildings here. The pedestals and remains of eight statues are visible on this façade.

inward, making the opening in the floor of the court or terrace about 3 feet in diameter. Sometimes the sides are covered with a fine lime plaster, which is very hard. These subterranean cisterns, near the most important structures of the dwelling-place type, were probably special reservoirs for them, and although they are far too small to have held enough water to last throughout the dry season, it was very easy as they became empty to fill them again from the large *aguadas* to the west.

The structures described above are by no means all that remains of this ancient city. Truth is that the jungle on every side for some little distance hides the wrecks of once imposing buildings, their presence now only to be detected by clumps of vegetation rising slightly higher than the general level of the plain. These buildings and their substructures have been literally torn asunder by trees which have driven their roots into them and pried apart the masonry. Creepers, vines, and bushes have so overgrown their sides that they look like wooded hillocks. Only on close examination does their real character appear, and it remains for the imagination to reconstruct their former glory. But all this ancient life, this great city once teeming with its toiling thousands, is gone. Palaces and temples glisten in the sunlight, with never the tread of sandled foot echoing through their empty courts nor chant of white-robed priests sacrificing to offended gods. Perchance a bird may flutter through some ruined doorway, chirping for its mate, or buzzard circling high soar above prospective prey. Save these all else is silent dead, the ancient pomp and glory forever departed, and gods and men alike forgotten in the onward sweep of time.



# CATTLE RAISING IN CHIRIQUI[a]

THAT portion of the Province of Chiriqui lying on the Pacific side of the Continental Divide and extending westward from the Rio Tabasara, contains the richest lands in the Republic of Panama. Of this area, the choicest section is what commonly goes by the name of the "Divala country," including the districts of Alanje, Boqueron, and Bugaba. This superlatively fertile region is situated between David, the capital of the Province, and the Costa Rican border. There is no finer agricultural land than it in the world. Along its *playas* the coco palm thrives. A little farther inland the admixture of sand in the deep



THE RANCH HOUSE IN CHIRIQUI.

stratum of alluvial soil, combined with climate and drainage, make such perfect conditions for the growth of sugar cane that the yield is as great as anywhere in the Tropics, although the fields are not irrigated, and tilled only in the most primitive manner. At somewhat higher elevations tropical fruits, tobacco, cacao, and rubber flourish, while in the mountain valleys the vegetables of the Temperate Zone and coffee of excellent quality are produced.

This country is admirably adapted to the pursuit of cattle raising. The land is covered by light forest, locally termed "*monte*," which may readily be cleared with the *machete*. At intervals this growth gives place to level expanses of grass-covered *llano*, often several square miles in extent, dotted here and there with wild fig or other

[a] By Forbes Lindsay.

shade trees in small stands or solitary station. The prevailing herbage of the *llanos* is *jenjebrillo*, which bears a close resemblance to the famous "blue grass" of Kentucky.

The region is abundantly watered. Every few miles a river or creek intersects the forest, but in the dry season all but the largest of these fail. It is where the interval between streams is unusually great, say, 7 or 8 miles, that the *monte* gives way to open grassland. The slope of the ground and the porosity of the soil insure perfect drainage, and there is an entire absence of swamps, save for the inevitable *manglare* strips along the coast.

When the development of Chiriqui shall have fairly set in, irrigation will surely become an important factor in the agricultural industries. Good reservoir sites are plentiful, and the lay of the land is perfectly suitable to the installation of simple, inexpensive gravity systems.

The climate of this section is subtropical and somewhat like that of Florida. The mean temperature is about 75° F., and the extreme variations do not exceed 15° in either direction. The heat of the day is usually tempered by breezes, and the night is cool at all times. The dry season extends over the first four months of the year, and recurs for a few weeks in September and October. During the remaining period there is almost daily rain which seldom extends through more than 3 or 4 hours in any 24, and is preceded and followed by clear weather. Excessive humidity is of rare occurrence. Destructive storms, hurricanes, and tornadoes are virtually unknown.

The climate is distinctly favorable to man and beast. Few diseases, if any, are attributable to it. The inhabitants of Chiriqui enjoy exceptionally good health, and this statement applies to the natives of Europe and America, of whom there are a number settled in the Province.

In the past 20 years, and perhaps much longer, no epidemic disease has appeared among men or animals in the province. Cattle are singularly free from the complaints which commonly afflict them elsewhere. Pleuropneumonia and anthrax have never been heard of. Blackleg once made its appearance, but was readily checked by vaccination.

The land in this portion of Chiriqui is of a generally level character, with a gentle, but constantly prevailing slope toward the ocean. The *llanos* may be traversed in any direction by the lightest vehicles with the ease which would be experienced in crossing a lawn. Cart roads are easily constructed through the forest stretches, in many cases nothing more being necessary than to clear the *monte* and remove rocks and the larger stones. The existing roads maintain communication between all centers of habitation and are quite equal to the requirements of any traffic which they may be called upon to

support for some years to come. They are not macadamized, but the natural material of which they are composed is such as to pack well and erode but little. I have seen extremely heavy downpours of rain run off them without miring. It may be repeated that the drainage of the entire section under consideration is perfect.

In the Divala country all nonfordable streams are bridged. Telegraph and telephone wires connect all the principal points. Extensive improvements are being carried out, which will affect the highway system and other means of intercommunication.

The Pacific Mail and the National Navigation Company maintain a weekly service between Panama and David, carrying passengers, mail,



CATTLE RAISING IN PANAMA.

and freight, including live stock, and calling at way ports, on a journey occupying from three to six days. The length of time is mainly to be accounted for by the difficulty in navigating the rivers at low tide. A fast service has lately been introduced, with a schedule time of 30 hours between Panama and David, and an extension of the run to Punta Arenas, Costa Rica.

It is needless to say that after the opening of the Panama Canal the facilities of Chiriquian products for water transportation will be greatly increased.

There is but one point upon the Pacific littoral of Panama at which vessels can approach the shore at low tide. This is a sea hole about

eight miles from Divala. It is sheltered by the promontory of Punta Burica and thus lies in a natural harbor. A port could easily be established at Chorca Azul, or "Blue Pool," as the sea hole in question is called, and it would become the outlet for the exports of the Divala country and a point at which steamers could call without any unusual delay.

A railroad has been surveyed from Panama to David and will without doubt be constructed in the near future. It is probable that this line will ultimately be extended to Bocas del Toro on the Atlantic coast.

Stock raising is the principal industry of Chiriqui, and there are in the Province more cattle than in all the rest of the Republic's territory. There can not be more than 50,000 head, all told, in Panama. Six or eight large ranches will account for nearly half the number, the remainder being scattered in small ownership.

The domestic supply of beef falls far short of the demand. Large quantities are shipped from the United States to the Canal Commission, the markets of Colon and Panama, as well as to the depot of the United Fruit Company at Bocas del Toro. This concern has tried ineffectually to contract with ranch owners of Chiriqui for 200 head a month. About two years ago a representative of Swift & Company went through the Province with a view to determining whether it would be feasible to establish a packing house there to supply the canned-beef trade of the west coast of South America. He soon determined that the available cattle would not keep a small factory running constantly.

Nevertheless, there is land in the Republic that would sustain 5,000,000 head of cattle. There is no better country for economical cattle raising. One acre of its *potrero* will fatten a steer, whereas 3 acres of our western grazing land is required to support one. But the soil of Panama has not yet been touched by a plow and, although cattle raising is the most advanced of the country's industries, the scope for improvement in the methods of conducting it is extremely great.

The *llanos* are the public "commons," upon which any man is free to range his stock. Probably 30,000 head, in herds seldom exceeding 15, are pastured on these plains through the rainy months, during which season the herbage is ample to keep the animals in good condition, though not sufficient to fatten them.

The *llanos*, or open grazing lands, are not saleable, nor alienable in any manner. There would be no inducement to purchase *llano*, except in the case of a large cattle owner who might design to range cattle in connection with *potrero* fattening, after the present method of our western country. Such a man would require a large extent of "commons" for his purposes. The only land worth having that is purchas-

able from the Government is that covered with "*monte.*" The reason for this is that wherever there is sufficient moisture to make the land cultivable such heavy growth will be found. The *llano* occurs where the interval between streams is unusually great and the land depends entirely upon rainfall for its moisture. In that case it will support none but the scantiest vegetation in the dry season. Crops could be raised on such ground satisfactorily only through the agency of irrigation. There are many parts of Panama where irrigation might be inexpensively applied to the *llanos,* and in time that development may be looked for.

Before the dry term has advanced far enough to parch the grass, the small owners sell their lean steers to the ranches, whence fatted cattle are sent to market in order to make room in the *potreros* for the new purchases.

A *potrero* is a fattening ground, made by clearing away the natural growth, save for a few shade trees, and, after burning over, planting in the several kinds of fodder plants suitable to the different soils. The varieties of grasses generally employed are guinea, savoya, para, and *jujuca.*

Para and *jujuca* are best adapted to cultivation in low-lying land and along river banks, because they readily absorb moisture and retain it for a long time. Guinea grass grows to 7 feet and over. The objection to it is that the cattle are apt to eat only about half the leaf from the top, leaving the remainder in a stool which has to be cleared at the end of the season. On the other hand, it has the advantage over para of retaining greater vitality during the dry weather. Guinea and para must be planted. They can not be sown with effect, for while they readily disseminate themselves the seeds will germinate only when gathered at perfect maturity.

Savoya is more spreading than guinea grass and does not grow to as great a height. It stools like the latter but not with as much waste. Cattle must be put to savoya in good season for they will not touch it in flower.

With these fodder plants the cattle raisers of Chiriqui obtain good results, the average steer yielding 400 pounds of meat, but there is no doubt that fattening might be contrived on more effective and economical lines.

Alfalfa should grow vigorously in many parts of the Province, where the loose sandy character of the soil is admirably calculated to promote the deep-rooting habit of the plant. At least two crops of alfalfa could be secured during the rains and with irrigation a third in the dry season.

With a view to the introduction of alfalfa to Panama I sent, about two years ago, several packages of selected seed to Chiriqui and the Canal Zone, but there is every reason to believe that it did not receive



UP COUNTRY IN CHIRIQUI.

Upper picture: A town in the cattle country of Chiriqui. Lower picture: A stretch of llano.

proper treatment, and no conclusive deduction can be drawn from the experiment.

It would seem that resort should be made to other forage crops than the grasses. If the land designed for *potreros*, or certain portions of it, were plowed over and sown in cowpeas, velvet beans, and other leguminous plants, better results would doubtless be secured, especially if this food should be balanced with a proper quantity of starchy matter, such as cassava. Such a regimen would produce a heavier grade of stock in a shorter time than is possible under the present method of fattening.

The by-products of the reduction of sugar cane and coconuts, bagasse, and press cake, respectively, are excellent fatteners, and under certain circumstances should be plentifully available.

There is room for much improvement in the breed of Chiriquian cattle. Blooded stock has been imported at great expense by a few ranch owners, and many experiments in crossing have been made. It can not be said, however, that a satisfactory decision has been reached as to the strain best adapted to the climate and conditions of the country.

Public land suitable to cattle raising may be secured on easy terms in almost any part of the Divala country. The issue of the BULLETIN OF THE PAN AMERICAN UNION for the month of September, 1910, contained an exhaustive article on the "Method of acquiring public land in Panama," and I refer the reader to that reliable source of information.

Although the purchaser of land for stock raising is required to have three-fourths of it in cultivation within four years, the same as with land for crop purposes, yet assurances are given by the authorities that a literal compliance with the law will by no means be required. The object of this provision is to discourage speculative acquisitions of land. The Government is eager to secure bona fide settlers, and will make conditions as easy as possible for them.

In the case of cattle land any degree of improvement that should indicate the intention of the holder of the land to put it to the declared purpose would suffice to insure title. To illustrate, if an entire tract of 4,000 acres were fenced, 1,000 acres turned into *potrero*, and 1,000 acres cleared for corrals, home pasture, buildings, and other purposes, the authorities would deem the intent of the law to have been amply complied with.

It may be well to warn intending settlers against taking up land at a distance from existing centers of habitation or development. The man who should do so will entail upon himself the burden of constructing a road at considerable expense, not to mention a number of more or less serious inconveniences.

There is public land available all along the proposed Panama-David Railroad line, but the best lands are in the "Divala country," to the west of David. The trouble and expense of reaching the railroad from this section would, however, be slight.

The expense of making *potrero* from *monte* will vary somewhat according to the local labor supply and the character of the virgin land. At present the average cost, including fencing, is about $5 per acre, with a tendency to rise, which will be accelerated by the increase of settlement. On the other hand, substantial economies might be effected by the use of simple machinery.

The ranch lands are inclosed with barbed wire, strung on live posts. Cuttings from the hog plum are set during the wet weather. These quickly root and display great vitality. They are cut back every year to a height of about 7 feet, but their branches are allowed to grow laterally, and from these a continuous supply of good straight fence posts is obtained. When dead wood is used, it rots rapidly in the damp climate, and necessitates frequent replacement.

Cattle can be raised in Chiriqui, and *potreros* maintained, at any elevation between sea level and 4,500 feet above it.

Lean cattle may be purchased at from $15 to $20 per head and, after six or eight months in the *potrero*, sell at $30 and upward. The price of fatted steers is steadily rising, stimulated by a protective tax imposed by the Government.

Cattle are raised in Chiriqui at a cost of slightly more than $1 per head per annum, and it is quite evident that this figure could be reduced by 20 per cent. On a fenced ranch the stock need hardly any attention. One man, with intermittent help, will look after 1,000 head.

The total expenses of a ranch at Divala, owned by an American, on which an average of 900 cattle were kept, were as follows: Yearly cleaning of pastures, $500; repairing and caring for fences, $100; salt, tar, acid, and ropes, $90; cowboy and occasional helpers, $270; sundries, $40; total, $1,000.

For several years past the net income from this property has increased at the rate of 20 per cent per annum. This statement should be considered in connection with the fact that the natural increase of cattle in Chiriqui is at the rate of 30 per cent yearly.

A brief statement of what may be accomplished by the investment of a moderate amount of capital follows. Maximum and minimum figures are used in every case and always applied adversely to the investor. It is assumed that the ranch will be run on the prevailing methods, but considerably greater profits can be secured by adopting improvements. The small payment to the Government to secure the land has not been included.

EXPENSES.

| | |
|---|---|
| Clearing, planting, and fencing 200 acres of pasture, at $6 per acre | $1,200 |
| Purchase of 200 thin steers, at $20 per head | 4,000 |
| Total cost of maintenance for one year | 500 |
| Total | 5,700 |

CATTLE ACCOUNT.

| | |
|---|---|
| Fattened steers, 200 head, at $30 per head | 6,000 |
| Natural increase, 60 head, at $18 per head | 1,080 |
| Total | 7,080 |
| Deduct expenses, interest, etc | 5,950 |
| Net profit | 1,130 |

It is needless to add that the returns will be proportionally greater with each year, and that a ranch on the basis of 1,000 head of cattle can be run more economically and with a larger percentage of profit than a small property such as that taken for illustration.

As to taxes, there is no likelihood that these will become onerous. The people of the country could not stand a substantial increase and the Government will never discriminate against foreigners. The present rate of taxation applied to the Divala ranch, which is worth at least $40,000 and yields an annual income of more than $10,000, is $208.97.

A highly important consideration to the prospective settler is the fact that the personal and property rights of an American in Panama are as secure as they would be in his own country. He need have no fear of violent political disturbance, nor of acute commercial derangement. The Republic is beyond question destined to enjoy a peaceful and prosperous development, the progress of which will rapidly increase as the Panama Canal approaches completion.

In conclusion, I will say with conviction that, taking all the concomitant conditions into consideration, there is no part of the world in which the industry of cattle raising may be pursued more favorably than in the "Divala country" of the Province of Chiriqui, Panama.



# THE IRON ORES OF BRAZIL

IN a recent address before the Franklin Institute at Philadelphia, Dr. Allerton S. Cushman, Director of the Bureau of Industrial Research at Washington, made the startling statement that, at the present rate of production, the iron supply of the United States would be exhausted in thirty years. He further pointed out that a continued increase in the production for the next three decades, at the present rate, would require an output exceeding, by twenty-five per cent, the available supply.

In view of this prediction and the possibility of an iron-ore scarcity in this country, it is not at all improbable that the United States will look to her sister republics to the south for this mineral product. At the present time, Brazil stands preeminent in the extent and richness of iron deposits. While their development and exploitation are still in a stage of infancy, nevertheless the number of mines and the character of the ore give promise of a bright and rich future for the iron industry in Brazil. We believe this situation justifies the reproduction of an article by Orville A. Derby, director of the Servico Geologico e Mineralogico do Brasil, at Rio de Janeiro, appearing in volume 2 of the "Iron Ore Resources of the World," which has recently been published.

The colonial records of Brazil register the fact that about 1590 an exploring party that set out from the town of São Paulo, founded about 40 years before, reported the finding of iron ore in a mountain situated about 100 kilometers to the southward. Gold and silver were also reported from the same region, and acting on this information the Portuguese Government took measures to promote the mining industry in the colony by sending out, in 1897, officials especially charged with this mission. The inclusion of an iron founder in the party indicates a special interest in the discovery of iron ore. One or two small forges were set up, which commenced to produce iron probably about the year 1600 and continued in activity to about 1629. The place subsequently took the name of Ipanema, which has ever since been inseparably connected with the long history of the iron industry in Brazil. There is a reasonable probability that the iron produced here was the first to be manufactured on the American continent.

About the same time a forge was established close to the town of São Paulo, in order to work the lean argillaceous ore that abounds in the vicinity, but it does not seem to have had a prolonged existence.

About a hundred years later the rich gold fields of the district of Ouro Preto, the former capital of the State of Minas Geraes, were discovered, and by the year 1700 the rush that ensued was fully established. This opened up to exploration and permanent settlement the most extensive and important of the Brazilian iron fields, that of the Serro do Espinhaço, or Backbone Range, forming the




eastern rim of the basin of the São Francisco River. A large part of the gold mines of this and the neighboring district are actually in iron ore which, from the difficulties it presented to the miners, must have necessarily attracted their attention to a marked degree, though a century or more elapsed before any recorded efforts were made to turn it to use.



A PORTION OF CURITYBA, BRAZIL.

Curityba, the capital of the State of Parana, has over 50,000 inhabitants. It lies 60 miles from the coast, at an elevation of 3,000 feet.

There is, however, a reasonable presumption that long before the definite establishment of the iron industry in this region some metal may have been produced by the primitive African methods, with which many of the slaves imported in immense numbers for the working of the gold mines must have been familiar. ESCHWEGE states that in 1811, when he arrived in the district, most of the smithies then existing produced their own iron, either directly by the spoonful in an ordinary blacksmith's forge or in a primitive furnace constructed especially for the purpose. Two men who were still living at that time disputed the honor of being the first to introduce the process, which was thus presumed to have been a recent event.

Under the direction of ESCHWEGE a company was formed to erect a direct-process plant in the neighborhood of Ouro Preto, which commenced to produce metal at the end of 1812 at the rate of about a hundredweight per day. The improvements here introduced were eagerly copied, and in a short time the whole mining district of Minas Geraes was dotted with little furnaces. The number of these was estimated in 1864 as 120, many of which are still in operation.

In 1765 the production of iron was resumed at Ipanema in São Paulo, but again abandoned after a few years. An attempt made in 1800 to revive the industry, this time by means of a high furnace, was unsuccessful, and in 1810 a Swedish metallurgist, under contract with the Government, constructed four direct-process furnaces, which continued in operation until 1818, when two high furnaces constructed by the German engineer officer, FREDERIC VON VARNHAGEN, then in the service of the Portuguese Government, were put into operation. These continued in blast under Government administration and with a daily production of 3 to 4 tons until 1895.

Between 1809 and 1814 an attempt was made to establish a high furnace at the Morro de Pilar, in the neighborhood of Serro, in Minas Geraes, but the enterprise was abandoned before reaching the productive stage, and until 1888 all the iron produced in Brazil, outside of Ipanema, was made by the direct process. In that year a high furnace with a daily capacity of 4 tons, afterwards raised to 6, was put into blast at Esperança, near Itabira do Campo, in the State of Minas Geraes, and this has continued in successful operation until the present, being now the only establishment of its kind in the whole country.

This history, extending over two centuries, is naturally suggestive of the existence of natural conditions unfavorable to the development of an iron industry in the country. Such unfavorable conditions exist, but for our present purpose it is sufficient to say that a deficiency of ore of excellent quality and in good working condition, as regards mining, is not one of them.

Iron ores of good appearance are known in every State of the Brazilian union and specimens of them figure in every national exposition, but for the most part definite information regarding the deposits is lacking. The greater part of the specimens exhibited in expositions and museums are magnetites, and the majority of those that have been examined have proved to be quite highly titaniferous. A good many specimens of hematites of excellent aspect, representing numerous widely separated localities, have also appeared.

Limiting ourselves to the districts regarding which definite information is at hand, it may be said that these belong to the States of Minas Geraes, Bahia, Goyaz, São Paulo, Paraná, Santa Catharina, Rio Grande do Sul, and Matto Grosso (fig. 1). The ores known in the first three and the last of these States are predominantly hematites; in the others predominantly magnetites.

With a single exception none of these ore districts have been studied in a way to give the definite information desired for the proposed discussion of the subject of iron ore supply by the International Geological Congress. For the most part, our knowledge of them is limited to the mere fact of their existence, their approximate geographical position and the outward aspect of the ore picked up by unskilled observers. These almost invariably report enormous quantities (whole mountains is the usual phrase) of most excellent ore, and in many cases it may be presumed that these statements may eventually be proved to have some foundation in fact, but for our present purpose such districts must be left entirely aside.

The above-mentioned exception is the district situated in the eastern central part of the State of Minas Geraes in the section of the Espinhaço range that forms the divide between the Rio Doce and São Francisco drainage systems, extending over about two degrees of latitude with a width of about one degree of longitude. As already remarked, this is also the most productive of the gold fields of Brazil, and in consequence is one of the oldest and most densely populated of the interior regions of the country. On this account and also on that of being on the road to the diamond region of northern Minas Geraes, it has been more frequently visited and described by travelers, scientifically and otherwise, than any other interior region. Notwithstanding this fact, however, it has only been very imperfectly mapped and there is a singular lack of reliable and accurate information regarding its geological and economic features. This lack is now being supplied by the work of a small party of the Serviço Geologico e Mineralogico do Brazil, under the direction of Dr. Luis Felippe Gonzaga de Campos, which for the last two years has been occupied in mapping the district, both topographically and geologically. Thus far only about half of the known iron field has been covered by this work, which is a reconnoissance rather than of a

definite character, though including a somewhat detailed study of some of the most prominent of the ore masses. The following brief account of the district is taken almost exclusively from a preliminary report now in course of preparation by Dr. GONZAGA DE CAMPOS.

At present the only means of access to this district is by the Central Railroad of Brazil which, starting from the port of Rio de Janeiro, enters the district by its southern border at kilometer 493, traverses it in a north-south direction for a distance of 90 kilometers to Sabará and extends a branch transversely across it, which when completed to Santa Barbara will have an extension of 60 kilometers. This is a Government road, with a gauge of 1.60 meters for 498 kilometers to



RIO GRANDE DO SUL, BRAZIL.

This city has a population of 25,000 inhabitants and lies near the southern border of the Republic. It is the gateway to an immense region exceedingly rich in natural resources. New port improvements are under way, which will be completed by the end of 1913. This will permit of a 35-foot channel, and will cost $10,000,000.

the station of Miguel Burnier and of 1 meter from that point onward. The Leopoldina Railway, a narrow (1 meter) gauge road belonging to an English company, starting from the same port, with a present extension of 630 kilometers, will eventually tap the district at its northeast corner at Itabira do Matto Dentro with an extension of about 87 kilometers. The Victoria and Diamantina Railroad, also of 1-meter gauge and belonging to a French company, is now under construction from the port of Victoria, in the State of Espirito Santo, toward the same point (Itabira), which it can reach with a total extension of about 630 kilometers. It is understood that the company proposes to complete this line as rapidly as possible and to equip it especially as an ore-carrying road. If this is done and if the

port of Victoria, which is an excellent one, is properly equipped with handling facilities, one of the most important parts of the district will have a satisfactory outlet in the near future.

The part of the region that has been mapped with approximate accuracy is represented in the accompanying special map (fig. 2), in which the iron-bearing formation covers an area of about 5,700 square kilometers. The ore field is known to extend to the northward, northeastward, and southwestward beyond the limits of the map which thus embraces only from a half to two-thirds of its total area.

In its essential geological features the region is constituted by a basement complex of crystalline schists (gneiss, mica-, amphibole-, chlorite-, and talcose-schists) much injected with granite, and overlaid by a heavy series of partially metamorphosed sedimentary beds, profoundly folded and faulted. In this series, which consists principally of quartzites and clay slates with subordinate beds of limestone, a prominent member is the peculiar iron-bearing quartzite to which the name of itabirite has been applied.[a]

This shows all possible gradations from an almost pure quartz rock with scattered flakes of hematite to a massive hermatite, free from quartz. The latter presents itself as intercalated layers, or lenses, varying from a few millimeters up to scores of meters in thickness, alternating with leaner quartzose portions. When limestones occur in the series, they also are generally more or less heavily charged with flakes of hematite and are frequently associated with commercially valuable ores of both iron and manganese.

Taken as a whole, the itabirite beds, which are often of great thickness, become, when exposed to the weather, extremely friable, and as the region is one of heavy rainfall (1,500 to 2,000 millimeters) they have been extensively denuded. In consequence of this, the massive portions, when they occur, stand out as prominent topographical features; the rain and wind swept slopes become covered with a rubble of iron ore due to the breaking up of the thinner intercalated layers, more or less completely freed from the associated siliceous elements by rain and wind action, and the bottom lands of

[a] This name was originally proposed by ESCHWEGE, in 1822 (Geognostisches Gemalde von Brazilien) for the massive pure iron ore of which the peak of Itabira do Campo, among others, is composed, and which is associated with a schistose rock composed of granular quartz and scaly hematite which he discriminated as iron-mica schist (Eisenglimmerschiefer). By common usage the name has come to be applied to the latter rock, and it is only in this sense that its retention can be justified as a convenient term for a rock type that would otherwise have to be designated by an awkward and misleading descriptive name. Through variation in the relative proportions of the constituent elements this type of rock grades off on one side to a purely quartzose and on the other side to purely hematitic phase. The phases sufficiently rich in iron to be commercially valuable may be conveniently designated as itabirite ores.

the valleys become charged with deposits of iron sand separated by the natural sluicing of the streams. There are thus produced from the same series of beds three classes of ore, namely:

Quarry ore in the peaks and other natural exposures in situ of the massive portions of the rock;

Rubble ore on the denuded surfaces; and

Sandy ore in the valleys where sluicing action has taken place.

To these must be added a fourth class, the so-called "canga" (contraction of tapanhoacanga—negro's head) due to the cementation by limonite of the rubble ore into a hard ironstone conglomerate.



THE FAMOUS IRON-ORE PEAK OF ITABIRA DO CAMPO, STATE OF MINAS GERAES, BRAZIL.

In Minas Geraes iron ores do not form seams but actual mountains. They are very pure and nearly inexhaustible.

It is probable also that still a fifth class might be recognized in the outcrops of quartz-hematite rock sufficiently friable to permit the separation of the metallic mineral by sluicing.

In this same sketch map (fig. 2) of the region only such bodies of quarry ore as were met with in the course of the operations of mapping are represented, to the number of 52. A considerable number of others that are known to exist, but that have not been seen by the survey officers and that can not be accurately located are omitted, and no account is taken of the patches of rubble ore and of "canga" that occurs in great numbers throughout the district independent of

massive ore outcrops. The shaded zone on the map represents the approximate limits of the area of crystalline rocks that nearly surrounds the elevated sedimentary plateau and which also appears in a sort of island in its midst. These crystalline areas of older rocks contain no iron ore, but in places, particularly in the southern part in the neighborhood of Queluz, there are important deposits of manganese ore that have been extensively mined. In the sedimentary area, on the contrary, iron ore of one kind or another is much more abundant and widespread than is indicated by the map. The outcrops figured are on belts of the iron-bearing formation that are so generally covered by superficial deposits of rubble ore and "canga" that by picking one's route it is possible to traverse the area mapped from one side to the other and along various lines, without leaving, except for short intervals, one or another of the various kinds of ore deposits above enumerated.

The breaks in the limits of the ore district represent prolongations of it into the surrounding country that have not yet been mapped. The one on the southwest extends off to the considerable mountain mass of Itatiaiassu, which is known to be composed in large part of the iron-bearing formation and is reputed to contain large workable deposits of ore; that on the north includes the main ridge of the Espinhaco range in the direction of Conceição and Serro, along which several iron mountains are known to occur, while the one on the northeast embraces the Candonga district, which is also reputed to be rich in ore.

From the above description it is evident that attempts to estimate the amount of ore in the district must be extremely fallacious. Practical iron men and geologists who have visited parts of the district (no one has an intimate knowledge of it as a whole) hesitate to pronounce impossible estimates that at first sight seem utterly preposterous. Prof. Henri Gorceix, founder and for many years director of the Mining School of Ouro Preto, who had a very intimate knowledge of the district, stated in a public lecture in 1881:

> I have estimated in five billion tons the iron ore that Minas Geraes might furnish, and I fancy that I should not be exaggerating if I should double this estimate.

Prof. Richard Penrose, the well-known economic geologist, who rode with me over a small part of the district mainly included in a large property, for which the owner's estimate was of "hundreds of millions of tons," says in a private letter:

> I do not know just what the extent of their property is, but though one can not see such quantities of ore actually blocked out, yet I would not consider such a statement as impossible of future realization in the regions you and I visited last year. I think such quantities might be produced. Of course, where the iron alternates in thin lamellæ with the siliceous layers, it is undesirable as an ore, because it is too siliceous. If, however, we exclude such material and count only the larger bodies of pure ore

that occasionally occur in it, such as the iron ore peak (Itabira do Campo) which we visited, and then consider the area of country over which the iron formation extends, the possible tonnage is immense.

The cubic contents of a limited number of the ore bodies have been estimated by competent observers on the basis of actual approximate measurements of their outcrops, but for the most part this has been done by private parties and the information is not available. The following examples of estimates, made by Dr. Gonzaga de Campos, of the Serviço Geologico, are believed to be as reliable as can at present be made and will serve to give an approximate idea of what the figures may mount up to when the district becomes better known.

These estimates for nine of the deposits are as follows:

| | Cubic meters. |
|---|---|
| Gaya | 72,000,000 |
| Conceição | 80,000,000 |
| Esmeril | 19,000,000 |
| Caué (Itabira Peak) | 33,000,000 |
| Pitanguy | 14,000,000 |
| São Luiz | 8,000,000 |
| Peak of Itabira do Campo | 8,000,000 |
| Rio de Peixe | 10,000,000 |
| Cocaes | 3,000,000 |
| Total | 247,000,000 |

Taking the mean specific gravity of these ores as 4, this volume represents 988,000,000 tons. The above list includes several of the largest known deposits, so that the contents of the others can not be estimated on a proportional basis, but it seems quite safe to assume for them at least an equal volume, which would double the above figures. In these estimates no account is taken of the presumed underground extension of the visible ore bodies.

No attempt has been made to estimate the volume of the rubble ore deposits which are known to be both numerous and extensive throughout the district. So far as the writer has learned only one such deposit has been actually measured by competent mining engineers and this is said to carry "20,800,000 tons of rubble ore, easy for stopping, carrying 50 per cent iron." From what is known of the district it seems quite safe to assume that there are scores of deposits of equal importance and that in the aggregate the volume of rubble ore is at least equal to that of the quarry ore.

As regards the "canga," Dr. Gonzaga de Campos estimates roughly that it covers about 10 per cent of the area occupied by the iron-bearing formation, which is about 5,700 square kilometers. For the purposes of calculation, however, he takes 5 per cent, with a mean thickness of 2 meters, which gives 570,000,000 cubic meters, which, calculated with the mean specific gravity of 3, gives

1,710,000,000 tons of ore, whose mean iron contents will probably oscillate in the neighborhood of 50 per cent.

As regards the quality of these ores, the existing analyses are naturally of hand specimens only, but all mineralogists and metallurgists alike who have examined the outcrops agree that on immense rock faces, such as represented in the accompanying photograph of the peak of Itabira do Campo, no differentiation of richer and poorer portions are perceptible to the eye.

Most of these analyses are deficient from an industrial point of view, as in the majority of them the phosphorus contents is given



SCENE IN THE STATE OF PARANA, BRAZIL.

The iron mines in this region are reached by a Government railroad 258 miles in length.

vaguely as "traces" without accurate determination, and no reference is made to titanium, leaving it doubtful whether this element had been especially looked for or not. The oxide of iron contents is generally given as from 67 to 99.5 per cent, the remainder being almost exclusively silica. In two cases in which, at the writer's suggestion, special tests were made for titanium, none was found, and from this and other considerations it seems safe to assume that as a class these ores are practically free from it.

The most reliable phosphorus determinations at hand are from samples from two different localities submitted to the Krupp works

and to those of the United States Steel Corporation, both of which give the same result, namely, 0.0024 per cent. In this connection it may be mentioned that some years ago the writer was consulted by the eminent French metallurgist, Mr. F. GAUTIER, who was then in charge of the Esperança works, working on rubble ore from near the Itabira do Campo peak, as to where he could obtain for admixture an ore higher in phosphorus.

In short, the quarry ores of the district here considered may be safely set down as existing in immense quantities and as of high and within certain limits uniform quality.

As no special study has been made of the other classes of ore of this district, very little can be said of them beyond the fact that they exist in immense quantities. From a practical point of view it is probable that, with the exception of the rubble class, they should only be considered as reserves for the future or as contribuents to a limited extent as admixtures.

As regards origin and composition, the rubble class of ore is practically identical with the quarry class. In mining it would naturally be impracticable to free the high-grade ore entirely from an admixture of earth and pebbles of lower-grade ore, and this would somewhat reduce the metallic produce, but this reduction would presumably be more than compensated, in most cases, by a reduced cost of mining and transportation, since in general this class of ore lies in more favorable positions than the other. Thus from an industrial point of view it seems tolerably safe to set the rubble ores down, as regards quantity and quality, as comparable with those of the quarry class.[a]

The "canga" class of ore is naturally of lower grade than the others, owing to a greater or less admixture of fragments of quartzose and argillaceous rocks, which it would be impracticable to separate in mining, and to the presence of water in the characteristic limonitic cement. Good observers estimate the mean iron contents of this class of ore at about 50 per cent. As already remarked, the apparent quantity of this class of ore is immense, and, so far as can be judged by a simple ocular inspection, probably in excess of that of any other class.

From lack of definite information regarding the deposits of sandy ores and of the technical conditions in which they could be utilized, this class must be left out of account in the present brief sketch. Suffice it to say that should a demand arise for this class of ore the district in question could supply it in great quantities.

[a] With reference to the estimate mentioned on a previous page of the quantity of available ore with an average contents of 50 per cent iron in one of the rubble fields, it should be noted that this particular field contains a large amount of ore of the "canga" class, which has evidently been included in the estimate.

Aside from the district above discussed and of its various prolongations that have not yet been examined, hematite ores are known to exist in various other districts of the State of Minas Geraes and in various other States of the Republic. These are generally considered, in most cases without sufficient evidence, to be substantially identical as regards geological conditions with those above described. Nothing is definitely known regarding their extent, but those of the western part of the State of Minas Geraes, the central part of the



SCENE IN MINAS GERAES, THE IRON REGION OF BRAZIL.

The State of Minas Geraes is larger than the Republic of France. It covers an area of 250,000 square miles, the greater portion of which is an elevated plateau, forming part of the vast central tableland of Brazil.

State of Goyaz, the São Francisco region of the State of Bahia, and the Corumbá district of the State of Matto Grosso are presumed to be extensive.

With the present means of transportation or with those that are likely to exist in the near future the greater part of these deposits must be regarded as inaccessible. The exceptions are those situated along the River São Francisco in the State of Bahia and near the banks of the River Paraguay in Matto Grosso. The former can be reached by 575 kilometers of railway from the port of Bahia to

Joazeiro and by a certain amount of river transportation upstream from that point, and also by 1,010 kilometers of railway from the port of Rio de Janeiro to Pirapora and downstream navigation from that point. The Matto Grosso ore deposits, situated in the Urucum Mountains, are about 30 kilometers distant from the seaport of Corumbá, which is 3,197 kilometers distant from the seaport of Buenos Aires, in the Argentine Republic.

The iron-ore formation seen many years ago by the writer at various points along the River São Francisco is believed to be identical with that of Minas Geraes, and some of the deposits may prove to be comparable with those above described as regards quantity and quality, but on this head nothing definite can be said, as the examination was of the most cursory character. That of Urucum, in Matto Grosso, occurs in association with manganese ores and with limestone, and in this respect offers a certain analogy with that of Minas Geraes, but it differs in the fact that the siliceous admixture where it occurs is in the form of jasper rather than that of granular quartz. The deposits are reputed on good authority to be extensive, but the quality, judging from chance specimens that have come to hand, is not as high as in the Minas Geraes ores.

As already remarked, magnetite is a very widespread mineral in Brazil and many of the occurrences are reputed to be extensive. The most accessible, and so far as known the most extensive, of these occurrences are situated in the coast region of southern Sao Paulo, Paraná, and Santa Catharina. Of these the only one known personally to the writer is in the first of these States and is too highly titaniferous to be industrially available. Various other occurrences that are only known by hand specimens and the statements of interested parties partake, though in a less degree, of the same defect; but among the samples examined are some of a manganiferous type that seem to be promising. Nothing, however, is definitely known regarding the economic conditions of this type of ore. The districts tributary to the ports of Paranagua, in the State of Paraná, and of São Francisco in that of Santa Catharina are well worthy of examination in this respect, as there is a reasonable probability that workable deposits of good ore may be found in them, and in this case their proximity to the seaboard would give them a great advantage over the known deposits of hematitic ores.

# THE SPONGE INDUSTRY IN THE AMERICAS[a]

WHERE do all the sponges come from? We see them every day, and while everyone knows that they are products of the sea, few know how they are gathered and how limited are the fishing districts where they are caught. To most people familiar only with the sponges of the shops, the animal as it comes from the sea would be rather unrecognizable. When brought to the surface they are black and slimy. The sponge of the market is merely the skeleton—the supporting framework—which gives strength and form to the soft gelatinous tissues of the living animal.

Sponges are known to the general public almost solely for their use in the toilet—one of their minor applications. They are vastly more valuable in the arts. To the surgeon the sponge is invaluable, almost, as a life-saver in taking up blood and checking hemorrhage; while the doctor formerly prescribed burnt sponge for glandular swellings, nowadays iodine and bromine, which are the chemical and useful constituents, are used alone. In many trades they are practically indispensable, and despite the efforts and ingenuity of inventors, no satisfactory substitute has ever been produced and it is doubtful whether one can be found. The properties that give a sponge its value are many; they are found in combination in no other natural or artificial product, and the perpetuation of the sponge supply is of no small moment to civilization.

Sponge life does not thrive in fresh water. Of the food of the sponges practically nothing is known. That it is taken in through the canal system and that it must be in a finely divided state is practically certain, but of what it consists is not known. They appear to have but few natural enemies. The so-called "roots" of sponges perform no other purpose than that of anchorage. The rate of growth of the sponge under natural, undisturbed conditions, is also a matter of uncertainty, but it is estimated that the average 6-inch sponge is probably only 4 years old.

The industry in the Americas is a most important one. The fisheries as at present developed are almost entirely restricted to the Caribbean Sea and the Gulf of Mexico, with its contiguous waters. As early as 1822 the inhabitants of Key West, Florida, learned, from specimens thrown up on the beaches, of the presence of several species of useful sponges. For some time they were in limited domestic use among

[a] By F. A. Pierce.

the inhabitants, but not until 1849 was a cargo sent to New York. Up to this time the entire sponge supply of the United States was derived from the Mediterranean, though of later years a few sponges come from the Bahamas. While sponge fishing in the Americas is rather a modern industry, it produces more than two-thirds of the world's supply in weight; but the fisheries of the Mediterranean now produce about one-half of the world's supply in value. An idea of the number of sponges produced by the fisheries of the Americas can perhaps best be grasped if it is realized that last year's crop of dry sponges weighed 4,000,000 pounds; and as each pound is capable of absorbing 14 pints of water, it will be seen that the total crop of the Americas could absorb 7,000,000 gallons. Nor should the annual



Courtesy of U. S. Bureau of Fisheries.

A SPONGE FLEET AT TARPON SPRINGS, FLORIDA.

This is the center of the fishing industry in Florida, over 900 vessels operating from this point alone.

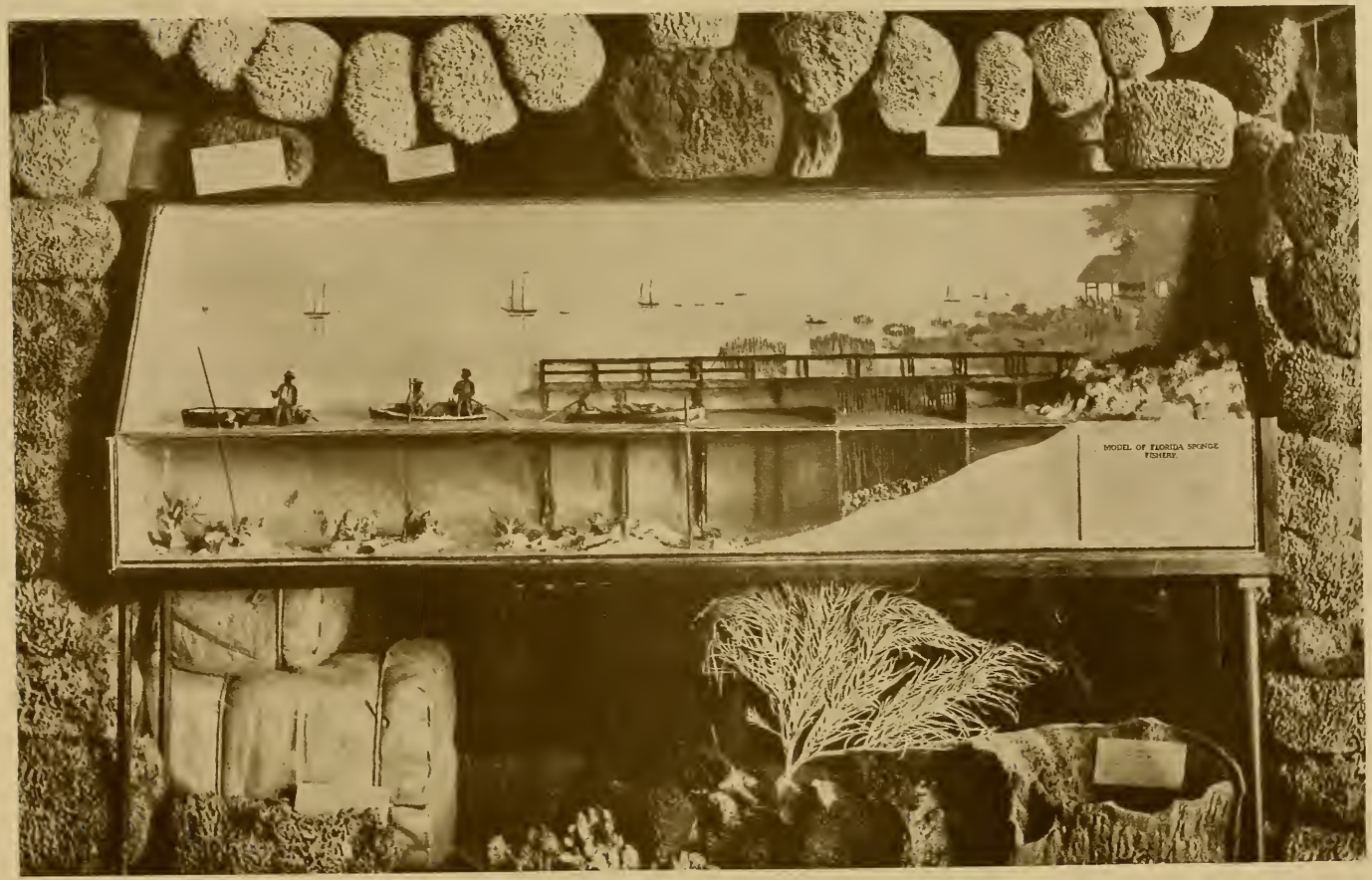
valuation of this product be lost sight of. During the last year there were produced in the Americas sponges valued at $1,500,000. The two places where sponge fishing is best studied in the Americas are at Tarpon Springs, Florida, and at Batabano, on the southern coast of Cuba.

On the Florida coast there are two well-defined sponge regions. The Key Grounds on the east, consisting of a chain of keys starting from the mainland near Miami and extending in the shape of a horn far into the Gulf of Mexico; and the Bay Grounds on the west, also extending into the Gulf of Mexico. The Bay Grounds, which formerly held a secondary position commercially, now yield practically the entire production of Florida sponges and are by far the most prolific

in the Americas. The Atlantic side of these regions is not adapted to the propagation of this animal because of the depth and low temperature of the waters and the frequent disturbances of hurricanes. These valuable sponge grounds have been overfished in and out of season to such an extent that Congress found it necessary to enact a stringent law for the protection and conservation of this industry. This law prohibits divers from working between the 1st of May and the 1st of October in waters less than 50 feet deep, and vessels of the Revenue-Cutter Service patrol the Florida waters to-day to see that this law is enforced. While the sponging areas of Batabano, Cuba, and the Tarpon Springs, Florida, are figuratively within a stone's throw of each other, yet the methods of gathering in this interesting animal at these points are entirely different.

In Florida the old method of gathering the sponge was to wade into the shallow waters and pull up the growth by hand. Later the sponge hook was introduced. This was a two-tined short hook attached to a pole of moderate length; a third tine was added to this implement after awhile. With the introduction of the sponge hook deeper water was explored. The fisherman standing in his boat closely scanned the bottom of the water for sponges, tearing them loose with the hook as discovered. To overcome the ripples in the water, which interfered with their fishing, the spongers soon learned to make use of oil, and that extracted from the liver of sharks was found to be the best. Another change in the method soon followed, for a man standing upright in his boat found considerable difficulty in seeing the bottom with sufficient distinctness. To overcome this obstacle, a "sponge glass," or "water telescope," was introduced, which was merely an ordinary wooden pail with a glass instead of wooden bottom. This device was introduced in 1870, and necessitated two men for each boat, one to propel the boat and the other to search for and gather up the sponges. Later large vessels came into use in the Florida waters and sponging was often carried on at a distance of 20 to 30 miles from shore. The average size of these vessels was about 15 tons capacity, rigged as schooners in the majority of cases, and carrying a crew of from 5 to 13 men. As a rule the proceeds of the sponging trips go into a common fund, from which each man receives his share according to his duties.

When a vessel reaches a sponging ground, if the weather is favorable and the water sufficiently clear a bar is located by means of "sighting" with a water glass. The crew is sent out in small boats, two men in each, called the "sculler" and the "hooker," the duty of the former being to propel the boat in obedience to the signals of the latter and assist in handling the hooks when necessary. A proficient sculler has perfect command of the boat, stopping it almost on the instant. Upon the hooker devolves the work of finding and catching the sponges. He leans over the side, watching the bottom




MODEL OF FLORIDA SPONGE FISHING INDUSTRY, ON EXHIBITION AT THE UNITED STATES BUREAU OF FISHERIES, WASHINGTON, D. C.

The method of hooking the sponges is here shown. Attention is called to the "kraals," built of wattled stakes, where the sponges are collected and automatically washed by the tide.

through his water glass, the hook with its pole resting conveniently across the boat where it may be seized upon the instant. The position is a trying one physically, especially when the sea is choppy, and when the waves grow rough the work is impossible. The sponge glass or bucket, with its glass bottom below the surface of the water, operates by dispelling reflection, and to heighten its efficiency the hooker usually wears a straw hat which cuts off a large part of the direct light when his head is thrust into the mouth of the bucket. By this means the bottom may sometimes be seen in clear water to



SPONGE FISHERS AT BATABANO, CUBA.

Each fishing smack carries a number of dories operated by two men, a "sculler" and a "hooker." The latter uses a water telescope consisting of a glass-bottomed bucket to aid him in spying out the sponges.

depths of 50 feet. When a sponge is sighted, the sculler maneuvers the boat into position at a word or signal from the hooker; the latter seizes his hook, resting the pole on his shoulder, and with his right hand lowers it. It is then injected into the sponge, more or less distinctly visible through the water glass, which is held in position with the left hand. In pulling or tearing the sponge a certain degree of skill is required to prevent mutilation, which, of course, impairs its value in the markets. Sometimes the formations adhere so tightly that it requires the united efforts of both men to loosen them, and in most cases parts of the base of the sponge are left behind.

In deep water—that is, in depths over 38 or 40 feet—probably not more than one-third of the hookers have sufficient strength, keenness of sight, and skill with the pole to work successfully. In consequence of this and the fact that only when the water is exceptionally clear can the sponges be seen at all in the greater depths, most of the hooking is carried on in less than 6 fathoms of water.

In 1895 the Mediterranean method of sponging with diving apparatus was introduced into the Florida field. It was most successful. Considerable opposition developed from those engaged in the old



Courtesy of U. S. Bureau of Fisheries.

SPECIMEN OF ROCK FROM SPONGE BEDS OFF ANCLOTE KEY, FLORIDA.

This rock bears 13 species of commercial and noncommercial sponges, besides corals, sea feathers, starfishes, crabs, and other animals characteristic of the fauna of the sponge beds.

hooking method to the introduction of diving, created from the belief that diving would lessen the value of sponges by vastly increasing the supply, as they could work with profit under weather conditions which would make hooking commercially impossible.

As compared with hooking, the diving system requires a much more expensive equipment. Its pumps, suits, and gear are all more costly than the sponge hooks and glasses, which constitute the secondary equipment of the hooker. The expense of operation and cost of maintenance are also heavier, and to meet this additional



Courtesy of U. S. Bureau of Fisheries.

A FLORIDA SPONGE DIVER.

Sponging, by the diving method, requires a crew of eight men; two divers who alternate on account of the arduousness of the duties; three oarsmen; two pump men who manage the air apparatus and hose; and one life-line man, whose important duty it is to see that the life line is kept clear and that the signals of the diver are promptly regarded. The law prohibits divers from working between the 1st of May and the 1st of October in waters less than 50 feet deep.

cost the yield per man must be considerably larger. From a productive standpoint, however, the diving method has several decided advantages; it can be carried on in rougher waters, at greater depths, and the diver is enabled to procure sponges which would be inaccessible to the hooker working on the same beds. The "shafander" or diving dress, a part of the diving system, has been abolished in the Mediterranean countries, since the diver by the use of this outfit was enabled to comb the bottom of a section with such thoroughness that he has almost exterminated the sponges in many parts. The



A SPONGE DOCK IN BATABANO, CUBA.

The sponge crop is sorted into grades preparatory to exhibiting them for market.

law therefore stepped in to assist nature in protecting this species. The "shafander" has recently also been debarred from the pearl fisheries of Tahiti.

The first diving or machine boats used in Florida waters were small sponging sloops from which the cabins were removed and which were otherwise remodeled to suit requirements. A pump was installed in the hold, from which the hatch was removed. It was soon found that these boats were too heavy and clumsy for the work, and so the boats of the Greek type were introduced. They are "double-enders," with high bows and sterns. More recently

gasoline engines have been placed on many of the boats, the propellers being guarded by cages to prevent fouling of the hose or life line, an accident which might readily prove fatal to the diver at work. On the starboard side is a heavy ladder, hinged so that it can be swung outboard and of sufficient length to extend 2 to 2½ feet below the surface of the water. This is an essential feature of the machine boat, as without it the diver with his heavy cumbersome armor could be brought aboard only with extreme difficulty. The divers carry with them to the bottom a large mesh sack into which the



EXHIBIT OF SPONGES IN BATABANO, CUBA.

The sponges are arranged according to quality upon which the buyers submit bids in writing. The owner reserves the right to refuse the bids if not satisfactory.

sponges are placed. The boats follow along the surface, pumping fresh air to the divers and hauling up and lowering the sponge bags whenever full or empty. There is little risk of life except from sharks. The water where sponges abound are infested with man-eaters, and many are the thrilling escapes of the men who work on the bottom of the sea. The sponge fishers carry no weapons, because a weapon that would cause death under water would have to draw blood, and with one shark killed the first trace of blood would draw a dozen more. The diving suits are too heavy for rapid movement. When one of the man-eating sharks appears the diver's only course

is to remain absolutely still, for the shark will not disturb anything he thinks dead.

Another method of gathering sponges which has not yet made its appearance in American waters is the sponge-fishing submarine boat, considered by many a practical and useful craft. This unique boat has been built at a French shipbuilding yard and sent to the sponge fishing grounds of Tunis, where it is now in operation. It is propelled by two steel oars, which are operated through two water-tight joints. Attached to the forward section of the keel is a wheel, upon which the vessel travels over the level bottom of hard sand



SPONGE PACKING HOUSE SCENE IN BATABANO, CUBA.

After trimming, the sponges are again sorted for size and quality. They are then compressed with a screw press to 40 per cent of their original bulk and packed in bales, wrapped in burlap, and roped.

upon which the sponges are found. The sponge-grappling apparatus consists of a movable arm which projects from the bow through a water-tight spherical joint. This is operated by a man inside the hull from a view obtained through the forward window. Electric lights furnish illumination. The sponges as fast as seized are thrown into a basket suspended from a forward arm of the boat.

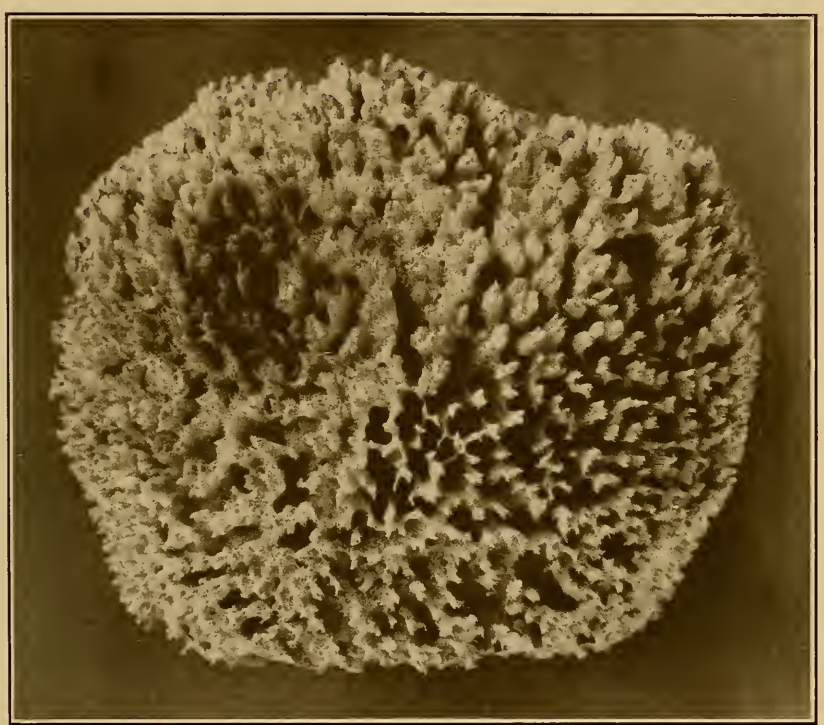
Thus it will be seen that while both the diving and hooking methods are in vogue in the sponging industry of Florida, the number of sponges which "get the hook" fully equals the number obtained by the divers. When the small boats carry their loads to the main ship the sponges are placed on deck and left there until all the slimy



SPONGE TRIMMERS AT BATABANO, CUBA.

At the sponge packing houses they are put through several processes of cleansing, and then the irregularities are clipped off with sheep shears. Considerable skill is required to reduce the sponges to desirable marketable shapes with the minimum of waste.

matter they contain is drained off. While the sponges are dying they give off a strong odor of ammonia, which, after a few days, changes to the more pleasant smell of seaweed. The schooner then returns to its base of operation and places its catch in pens or "kraals," generally about 10 feet square and built of wattled stakes driven in shallow water in the shelter of some key or land, so that the flowing tide washes the sponges as it comes and goes. This washing process takes about one week, after which the sponges are thoroughly



(Photos of sponges furnished through courtesy of U. S. Bureau of Fisheries.)

SHEEPSWOOL SPONGE—ROCK ISLAND, FLORIDA.

This grade of sheepswool sponge is considered the best and highest priced of North America. The surface color is grayish brown, and the root and interior are little tinged with red. They are soft, absorbent, very durable, and of good shape. For general bath purposes, and cleaning carriages, cars, and other highly polished surfaces, they are unequaled.

squeezed out and beaten with sticks until all the living matter disappears. They are then strung in bunches upon pieces of rope. After drying the sponges are cleansed out quite thoroughly by hand, sorted according to kinds, arranged in piles to show them to the best advantage, and soaked in water in order to swell them to their largest proportions. They are now ready for market, and this phase of the industry is a most interesting one.

At appointed times, sponge buyers assemble and, proceeding from pile to pile, bid for each separately, basing their bids on the number

of bunches and the size and grade of the sponges. Each bidder writes his offer on a slip of paper and hands it to a person designated for that purpose, who, when all the bids are in, reads them off, awarding the lot to the highest. The owner reserves the right, however, to refuse to sell at the bids offered.

After purchasing, the buyers forward the sponges to their packing and warehouses, which they maintain at convenient points on the coast. Here they are thoroughly cleansed of the remaining dirt, all foreign particles are removed, and the irregular and torn parts are clipped with shears, the clippers requiring a degree of skill to reduce the sponge to regular shape with the minimum waste. After being



YELLOW SPONGE—FLORIDA KEY.

This species, cake shaped and massive, is the finest grade of yellow sponges. It is attractive in appearance, harder than the wool sponge, and less absorbent and durable. The color is usually a rich yellow, sometimes tinged with rust red or chestnut. The yellow sponges are excellent for many purposes in the arts, and when bleached make attractive and soft, cheap bath sponges.

trimmed the sponges are sorted according to size and quality, and pressed into bales, which are wrapped in burlap. But one size, kind, and grade of sponge is placed in a bale, which usually weighs from 15 to 60 pounds. The machinery used in baling resembles very much the cotton presses. The sponges are packed almost dry, so that the pieces, when relieved from pressure, remain compressed until moistened. As sponges are sold by weight they are often adulterated an additional weight added by a system of "loading." This is accomplished by thoroughly soaking the sponges in a preparation of rock salt, glucose, and sand, and then put through a wringer and laid out to drain. To aid in appearance and selling value sponges are bleached

before marketing. One process is the use of a solution of lime and sea water; if the solution is made too strong with lime it renders the sponge hard and easy to tear. Another method is immersing the sponge in soapsuds and exposing it to the action of the sun and air. While bleaching is of importance from the commercial standpoint, there is no doubt that practical value of the sponge is impaired, as it weakens the fiber and shortens its period of usefulness.

In Cuba the sponge is found both on the north and south coasts. The most important beds are on the southern coast in the vicinity of Batabano, between the mainland and the Isle of Pines. These

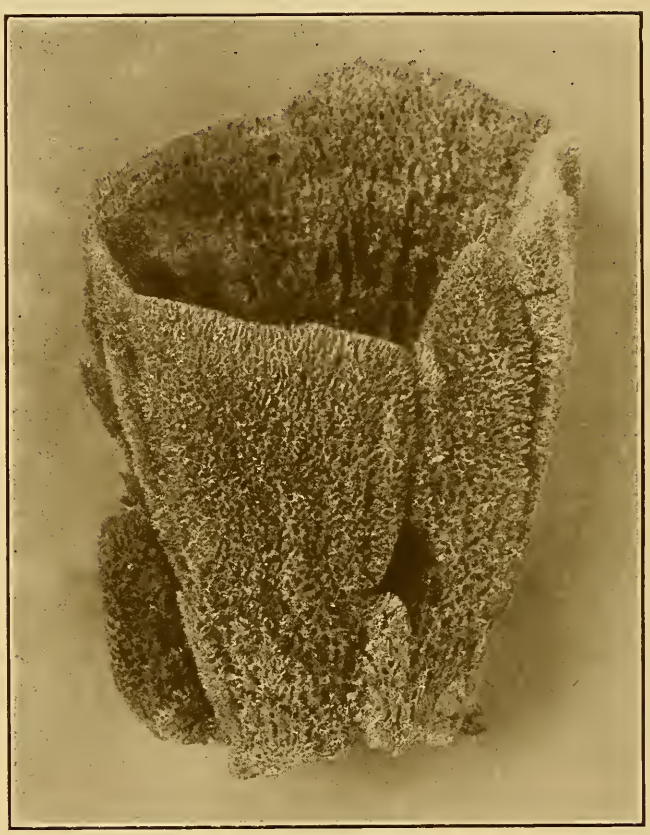


ANCLOTE YELLOW SPONGE, FLORIDA.

This variety of the yellow sponge is more massive than the usual Key yellow. The surface is uneven and lumpy, and the whole sponge is harsher and less compressible than the Key yellow. It is less desirable for commercial purposes.

grounds were discovered in 1844, and enjoyed an annual output during the last year amounting to approximately one-half million dollars. Over 25 per cent of Batabano's male population are engaged in sponging—about 1,500 in fishing and 500 more in trimming and marketing the output. The average grade of sponges from Batabano is valued at $2 to $2.25 per pound, and some of the largest wool sponges weigh as much as 4 and even 6 pounds. The trimmings are baled and delivered aboard ship in Havana at $1.50 per 100 pounds, and are used in the United States for filtering purposes, packing explosives, delicate articles, etc. The industry is unionized here and none but members of the union are permitted to engage in

the fisheries. Some effort is being made to protect the industry on this island by closing certain sections for three months at a time, so as to give the animal growth a chance to recuperate. This, however, accomplishes but little in the desired result, since it requires from three to seven years for a sponge to grow to marketable size. What should be done is to carefully study and determine the spawning



THE ANCLOTE GRASS SPONGE.

These are the best of the grass sponges, but their shape is such that they are generally used as cuts. They are almost always shaped like waste-paper baskets, inverted truncated cones deeply hollowed on their upper faces. The skeletons are of a dirty brown color, harsh to the touch, and highly elastic and resilient. They are mainly used by manufacturers of explosives, by masons, and for cleaning purposes about the machine shop as well as in the kitchen.

season of the different sponges and forbid their being taken at such times and until they have attained a certain size and growth.

The method of hooking has proved to be the most satisfactory and effective for fishing sponges in Cuba, though a few are taken in shallow waters by wading. Here also, as in Florida, the marketing is done by auction, although the method of stringing a dozen sponges of uniform size and hanging in festoons for inspection before sale is

considered more satisfactory than the laying out in piles, as in Florida. It affords the buyer ample opportunity to determine the grade and value of the cargoes offered. About one-half of the sponges from Cuba are marketed in the United States, where a duty of 16 per cent is imposed, and the balance goes to England, France, and Germany.

While sponges are found in several other sections of the Americas, the distinction of furnishing the greatest variety belongs to Florida and the West Indies, the more popular grades being sheep's-wool, velvet, yellow, grass, glove, reef, and wire. The highest priced sponge is the Turkish. These have brought as high as $50 per pound,



THE KEY GRASS SPONGE.

Another species of the grass sponges which is even more varied in appearance than the corresponding grade from Anclote. They are, however, softer and more compressible, but less durable.

but their production is extremely limited. Next is America's sheep's-wool variety, so called because of its resemblance. Notwithstanding that this is a much cheaper grade, it is often preferred to the Turkish sponge as a toilet article. Then, in order, follow the velvet, yellow, grass, and glove sponges.

Extensive sponge beds also exist in the Bahama Islands. Here a very good quality is produced and the fisheries date back from 1841. The value of their product has averaged over half a million dollars per year and marks the chief industry of the islands. Practically all of the sponges are taken by means of the hook. The United States imports one-half of the annual production of these islands. In British

Honduras sponges are found along the entire coast, while Nicaragua and the Island of Gonaves, in the Republic of Haiti, claim extensive sponge beds. In Mexico, on the north and east coasts of Yucatan, there are sponge beds which have but recently been exploited. According to surveys made, it is said that there is an abundance of the silk and sheep's-wool varieties. An American syndicate, composed of business men from New Orleans, has begun operations on the east



THE KEY GLOVE SPONGE OF FLORIDA.

This grade of sponge is found on the Key and Bay grounds of Florida and in the Bahamas—the Bay ground specimens are, however, very poor. Glove sponges are very soft and elastic, but owing to the weakness of their fiber and their open texture they are almost worthless for commercial purposes.

coast, and it is planned to work to a depth of 100 feet, using the Greek divers equipped with modern apparatus. The Bay of Cartagena, in Colombia, is rich in sponge beds and the local fishers claim for it sponges of excellent quality and size. Concessions have recently been granted for the exploitation of the industry.

Interesting experiments have been conducted in transplanting sponges alive. These have been quite successful, and valuable live

Turkish sponges have been moved to American waters. Some success in Cuba has attended attempts at growing sponges by fastening cut sections to bamboo strips and sinking into water, but the long time required for them to mature makes the experiment doubtful.

Dr. H. F. Moore, Scientific Assistant, United States Bureau of Fisheries, who was awarded the prize of one hundred dollars gold at the Fourth International Fishery Congress, in 1908, for the most comprehensive paper on sponge fisheries, has conducted a series of experiment which have resulted in the production of the rootless sponge. The root of the sponge is its most vulnerable part, and at this point it first begins to tear. A rootless sponge, therefore, will far outlast the common variety. The method of producing the rootless sponge is to cut the animals into pieces about 2 inches square. These small sections are then strung on wires fastened to stakes driven into the shallow sea water. In eighteen months these seeds attain twenty-five times their original weight. These cuttings grow into a perfect ball, with no vulnerable point, their roots being on the inside. All species of sponges can be reproduced in this extraordinary way.



# THE BITUMINOUS COAL OF CHILE

FOR a number of years past there has been a steady increase in the production and consumption of the bituminous coal of Chile. This has been due in part to the lower cost of the domestic coal in comparison with the price of imported coal, but largely and chiefly to a better knowledge on the part of the consuming public of the quality and excellence of Chilean coal. When coal from the mines of Chile was first placed upon the market, little



COAL MINES AT LOTA, CHILE.

The town is situated on Arauco Bay, and is the center of a large coaling region. A copper smelter and fire-brick manufactory are also located here. On the hill in the left-hand corner of the middle background is the beautiful Cousiño Park.

care was exercised in exploiting the deposits or in classifying and sorting the various grades. As a result, in many instances unsatisfactory results were obtained and Chilean coal was unjustly and erroneously branded as being of a quality inferior to the imported article.

This mistaken impression is, however, disappearing to a considerable extent, both at home and abroad, as a result of the assuring experiments of experts and the repeated comparative analyses of

Chilean with different classes of foreign coal. The results of these experiments prove that, with the exception of one certain class of British coal, the domestic coal of the Republic is equal in quality and calorific power to that mined in other parts of England, Australia, France, Germany, Belgium, Russia, and Japan. The class of English coal which is conceded as slightly superior to the domestic product forms but a small part of the total quantity of coal imported into the country.

It may be stated with certainty that the greater part of the foreign coal brought into Chile is not alone higher in price, but is even of an inferior quality to the domestic product in calorific power and general



ELECTRIC TRAIN ON THE "CARLOS ALBERTO" MINE.

In the coal mines at Lota, which are very largely worked under the Pacific Ocean, electricity is used throughout, both for lighting and traction. The picture shows an electric train just emerging from a submarine tunnel over a mile in length.

desirability for industrial purposes. This assertion has been verified time and again by numerous analyses, many of which have been made by the engineers of the State railways. These experiments and reports are available for consultation by anyone interested in this question.

The report of Carlos Eguiluz, who was sent by the Chilean Government to England and Australia to study the quality, desirability, and price of English and Australian coal in comparison with the Chilean article, is exceedingly interesting, demonstrating, as it does, the superiority of Chilean over Australian coal.

The Rios de Curanilahue Coal Company, which furnishes large quantities of fuel to the State railways, had their mines investigated and reported upon by two distinguished engineering experts, José del C. Fuenzalida and Eduardo Lemaitre. In referring to the quality of the different classes of coal mined by their company, the report indicates that the State railways are the principal consumers of coal from the mines of the company, and their continued use of this fuel in preference to all others constitutes the best proof of the excellent quality of this coal, which can compete advantageously with foreign products.



ENTRANCE TO A COAL MINE AT LOTA, CHILE.

Estimated on the basis of the production for the first six months of 1910, the total output of coal from the mines of Lota, for the year 1910, is given as 150,000 tons.

A valuable official report on Chilean coal, made many years ago by Ignacio Domeyko, an expert mining engineer, who visited and examined thoroughly the northern and southern Chilean coal fields, was published by the Government of Chile under the title, "Measures to Encourage the Mining Industry in Chile." This interesting document claims that the use of Chilean coal for manufacturing establishments is more advantageous than English coal, and that, for all industrial purposes, the former could supplant the imported grades.

Investigations to ascertain the possible use of Chilean coal in the iron and steel industries of the Republic were conducted, at the instance of the Chilean Government, by E. F. Durre, professor of metallurgy at the University of Aachen (Germany); D. Hovine, a

Belgian mining engineer; and Mr. DELAFORD, chief engineer of the National Society of Mines of Paris, in conjunction with the celebrated French chemist, M. VATTIER. The results of these investigations and experiments were most satisfactory, and a unanimous report was submitted declaring that Chilean coal was of excellent quality and entirely adapted to all forms of commercial use as well as to the iron and steel industries.

Doctor SIEVERING, of Berlin, in an exhaustive and careful study of Chilean coal, states that it compares favorably with the best coal known in the markets of the world, and that it is superior in many



WORKING AT A DEPTH OF 1,000 FEET IN THE COAL MINES OF THE COUSIÑA COMPANY, AT LOTA, CHILE.

The Cousiña Company controls a large area of coal mines in this city, and employs over 6,000 miners.

ways to the coal generally sold, including German coal. MIGUEL R. MACHADO, a mining engineer, who published a report on Chilean coal in 1905 in the bulletin of the inspection of mines, compares the analyses of Chilean coal with those of foreign coal, and shows that the domestic product is equal to the best commercial coal of the world.

The Arauco Carboniferous Company had analyses of a number of samples of Arauco coal made by a well-known firm of London chemists and compared the results with the analyses of Welsh coal published by the British Admiralty. But little difference was found in the quality of Chilean and English coal, the Chilean coal being superior to many classes of English coal, and being equal in calorific power to

from 92 to 93.8 per cent of the best class of English coal. Comparisons of Chilean with Australian coal gave even better results, and showed that Chilean coal is superior to the Duckenfeld Australian coal, the grade which is imported in largest quantities into Chile.

A distinguished engineer, JULIO DUPLAQUET, who made a careful and systematic study of the Chilean coal fields, publishing his observations thereon in 1906, is convinced of the excellent quality of Chilean coal and of its superiority over many other grades of fuel. He specifically states that it is superior to the best grades of Japanese coal.

The Chilean Mining Statistics, published in 1903 by the National Society of Mines, show that the calorific power of Chilean coal is from 7,891 to 7,978 units, as compared with the best English coal, which gives 8,167 units. In other words, if a certain quantity of English coal raises 8,167 liters of water from 1° to 100° C. in a specified time, an equal quantity of Chilean coal in the same time would raise 7,978 liters of water from 1° to 100° C. Reducing this proposition to its simplest form, it would require the same quantity of English coal to boil 81 liters of water as it would an equal quantity of Chilean coal to boil 79 liters of water.

Arguing along these lines, DOMEKYO contended that while the best quality of English coal is slightly superior to Chilean coal, industrially and commercially speaking, the use of Chilean coal is preferable, inasmuch as it is cheaper, and that the difference in the price of the two coals more than compensates for the slight excess of calorific power of the best grade of English coal over the Chilean product. For this reason the latter is by far more economical, and, at the same time, as desirable for industrial usages as is the English coal. That these reports of the experts are not merely theoretical views, has been evidenced time and again by the large quantities of Chilean coal which the State railways of Chile are purchasing. Recent advices indicate that an order has just been placed by these railways for 60,000 tons of coal from the mines of Lota, Coronel, and Marcelo Huet at $5.93 per ton, and 80,000 tons from Rios de Curanilahue mines.



# FIRST SOUTH AMERICAN CONTINENTAL POSTAL CONGRESS, AT MONTEVIDEO

THE First South American Continental Postal Congress held its inaugural session in Atheneum Hall, Montevideo, Uruguay, on January 8, 1911, and adjourned on the second of February. The Second South American Continental Postal Congress will convene in 1916 at a place to be selected in 1915 by a majority vote of the participating countries, expressed through the medium of the International Postal Bureau established in Montevideo by the First South American Postal Congress. All of the Republics of South America were represented in this conference, and the utmost harmony and good will prevailed in all the acts and deliberations of the assembly. The following is a list of the delegates to the Congress:

ARGENTINE REPUBLIC.

Sr. Solano Torres Cabrera, Sr. Juan Migoni.

BOLIVIA.

Dr. Cornelio Rios, Dr. Alberto Diez de Medina.

BRAZIL.

Dr. Francisco José de Almeida Brant, Mr. Domingo Leonardo Pires de Castro Lopez, Dr. Virgilio Silvestre de Faria.

COLOMBIA.

The following Chilean delegates were appointed by the President of Colombia to represent the latter country in the proceedings of the Congress, to wit:

Sr. Guillermo Perez Valdivieso, Sr. Ricardo Vargas M.

CHILE.

Dr. Marcial Martinez de Ferrari, Sr. Guillermo Perez Valdivieso, Sr. Ricardo Vargas M.

ECUADOR.

Dr. Matias Alonso Criado.

PARAGUAY.

Sr. Juan Francisco Perez, Dr. Luis Abente Haedo.

PERU.

Sr. Manuel Elias Bonnemaison.

URUGUAY.

Sr. Francisco Garcia Santos, Sr. Juan Rampon, Sr. Guzman Papini, Sr. Emilio Milhas, Jr., Sr. Hector R. Gomez, Sr. Juan Capurro.

VENEZUELA.

Sr. Jose Enrique Rodó.

The inaugural session was opened by Sr. Benjamin Fernandez y Medina, Minister of the Interior of the Republic of Uruguay, in the presence of the Diplomatic Corps accredited to the Uruguayan capital, prominent Government officials, and a large gathering of distinguished persons. The temporary chairman, after welcoming the delegates in a short and appropriate address on behalf of the Uruguayan Government and people, proceeded to the real work of the convention by the election of the officers of the Congress. Sr. Benjamin Fernandez y Medina, Minister of the Interior of the Republic of Uruguay, and Dr. Emilio Barbaroux, Minister of Foreign Affairs of Uruguay, were chosen honorary presidents of the Congress, and the Director General of Posts and Telegraphs of Uruguay, Sr. Francisco Garcia y Santos, who was largely instrumental in having the Congress meet in Montevideo, was elected chairman. Sr. Solano Torres y Cabrera, of the Argentine Republic; Dr. Francisco Josè de Almeida Brant, of Brazil, and Dr. Marcial Martinez de Ferrari, of Chile, were elected vice chairmen of the Congress. Sr. Guzman Papini, Secretary of the Department of Posts and Telegraphs of Uruguay, and Sr. Emilio Milhas, Jr., Chief of the International Bureau of Posts and Telegraphs of the Uruguayan Republic, were elected secretaries of the Congress.



SEÑOR DON FRANCISCO GARCIA Y SANTOS.

Director General of Posts and Telegraphs of Uruguay, who was elected chairman of the First South American Postal Congress at Montevideo, January 8–February 2, 1911.

In order to facilitate the business and to study intelligently in detail the different subjects presented to it, the work of the Congress was divided into five topics and the following committees appointed to report on the same for the consideration of the Congress:

*First Committee, General Convention.*—Juan Francisco Perez (Paraguay), chairman; Juan Migoni (Argentina), secretary; Alberto Diez de Medina (Bolivia), Francisco José de Almeida Brant (Brazil), Ricardo Vargas M. (Chile-Colombia), Matias Alonso Criado (Ecuador), Manuel Elias Bonnemaison (Peru), Hector R. Gomez (Uruguay), and José Enrique Rodó (Venezuela).

*Second Committee, Postal Orders, Savings Banks, and Declared Values.*—Cornelio Rios (Bolivia), chairman; Virgilio Silvestre de Faria (Brazil), secretary; Guillermo Perez Valdivieso (Chile-Colombia), Manuel Elias Bonnemaison (Peru), and Juan Capurro (Uruguay).

*Third Committee, Parcels Post.*—Manuel Elias Bonnemaison (Peru), chairman; Ricardo Vargas M. (Chile-Colombia), secretary; Solano Torres Cabrera (Argentina), Domingo Leonardo Pires de Castro Lopez (Brazil), and Juan Rampon (Uruguay).

*Fourth Committee, International Postal Bureau.*—Matias Alonso Criado (Ecuador), chairman; Juan Capurro (Uruguay), secretary; Cornelio Rios (Bolivia); Domingo Leonardo Pires de Castro Lopez (Brazil); Ricardo Vargas M. (Chile-Colombia); Luis Abente Haedo (Paraguay); Manuel Elias Bonnemaison (Peru); José Enrique Rodó (Venezuela), and Juan Migoni (Argentina).

*Fifth Committee, Miscellaneous Subjects.*—José Enrique Rodó (Venezuela), chairman; Juan Rampon (Uruguay), secretary; Alberto Diez de Medina (Bolivia); Francisco José de Almeida Brant (Brazil), and Guillermo Perez Valdivieso (Chile-Colombia).

With the object of extending and improving the intercontinental postal service of South America, and in order to establish unity of action at Universal Postal Congresses in which the American Republics may participate, the following ad referendum convention was reported to the assembly by Committee No. 1, and was unanimously adopted by the Congress:

Article One.—*Union of South American post offices.*

The contracting countries which, in accordance with the preceding declaration, constitute a close union for the purpose of facilitating and improving the carrying out of all postal services, agree to modify the Universal Postal Convention in the manner set forth in the following clauses:

Article Two.—*Transit expenses.*

The contracting countries agree to establish free territorial and maritime transit for all correspondence exclusively continental.

This free transit shall become binding when the new general statistics that are now being compiled in accordance with Article XXXIII of the rules and regulations for the enforcement of the Postal Convention of Rome become operative.

Article Three.—*Rates and conditions of shipments.*

The rates which the Convention of Rome establishes are reduced on correspondence between the contracting countries in the following manner:

(1) On letters, 20 centimes for the first 20 grams, and 10 centimes for each additional 20 grams or fraction thereof.

(2) On daily newspapers and periodic publications, 2½ centimes for each 100 grams or fraction thereof.

(3) On samples, 2½ centimes for each 50 grams or fraction thereof, with a minimum postage of 5 centimes. The maximum weight of packages of samples is raised to 500 grams.

(4) The fixed charges for registration, return receipts, and requests for tracing registered mail not entitled to return receipt, as well as the postage on shipments by express, are reduced to 20 centimes.

(5) The postal administrations of the contracting countries waive the right to receive from the senders of mail any additional charges on mail deposited addressed to any of the postal administrations of the signatory powers.




THE ANTHENEUM AT MONTEVIDEO WHERE THE POSTAL CONGRESS HELD ITS SESSIONS.

ARTICLE FOUR.—*Liability for registered articles.*

(1) The indemnity referred to in paragraph 1 of article 8 of the Convention of Rome will also be paid in proven cases of violation within the postal service.

(2) A maximum term of 10 months is fixed for the answer to claims for registered articles, holding the post office that does not answer a claim in that length of time responsible for the loss.

ARTICLE FIVE.—*Franking privileges.*

(1) The contracting countries agree to grant ample franking privileges to the mail of the International South American Postal Bureau, to the Diplomatic Corps in general, and to consular representatives in the dispatch of mail to their respective Governments.

Likewise the usual correspondence of national institutions of a scientific character and of common interest, as well as the correspondence of South American scientific conferences in which the majority of the nations of the continent are represented, shall circulate without charge.

(2) The exemption of postage on exchange copies issued by newspapers and South American publications, up to two copies for each address, is likewise agreed to.

ARTICLE SIX.—*Undelivered mail.*

The postal administrations of the contracting countries are not obligated to return to the country of origin undelivered newspapers, periodic publications, and printed matter that have been forwarded at the reduced tariff of their class.

ARTICLE SEVEN.—*Prohibition.*

Without prejudice to the provisions of the domestic laws of each country concerning restrictions as to the circulation of mail, dispatch will not be given to obscene literature.

ARTICLE EIGHT.—*Accessory services.*

(1) The post offices of the contracting countries agree to adhere as soon as possible to the Convention of Rome concerning identification books.

(2) The contracting countries will also establish letter service with declared value, and the advice to which the Convention of Rome refers having been previously obtained, the countries deeming it expedient will establish the service of boxes with declared value.

(3) The countries that are not ready to accept the maximum of 10,000 francs, which the Convention of Rome prescribes, are authorized to limit it to 1,000 francs.

(4) The credit on each box for land transportation is reduced to 25 centimes. For maritime transportation the credit of 25 centimes on each box is fixed for any distance carried not in excess of 500 miles, 50 centimes for distances of more than 500 up to 2,500 miles, and 1 franc for distances greater than 2,500 miles.

ARTICLE NINE.—*Arbitration.*

Every dispute or disagreement that may arise in the postal relations of South America shall be settled by arbitration effected in the manner prescribed by article 23 of the principal Convention of Rome.

ARTICLE TEN.—*Sundry provisions.*

(1) The contracting countries shall establish the service of *paid postage* on newspapers and periodic publications, loose sheets or in packages, with the exclusion of those of propaganda or commercial reclaim, leaving to the postal departments of the contracting countries the determination of the required guaranty and other requi-

sites that the newspaper concerns must comply with in order that their publications may enjoy this privilege.

(2) The contracting countries will negotiate with the respective navigation companies for the free transportation of the mails that are exchanged between them.

(3) Likewise, they shall negotiate with the navigation companies which ply the South American waters in order that they may furnish adequate of facilities for the transmission of pouches and mail dispatched at the last hour.

ARTICLE ELEVEN.—*Protection to postal agents.*

The authorities of the contracting countries are obligated to render, when solicited, such cooperation as may be needed by postal agents charged with the transportation of pouches and mail in transit through said countries.

ARTICLE TWELVE.—*International South American Postal Bureau.*

(1) There is hereby organized, under the name of the International South American Postal Bureau, a central bureau with headquarters in Montevideo under the supervision of the Government of the Republic of Uruguay, and the expenses of which shall be borne by all of the postal administrations of the contracting countries.

(2) The International South American Postal Bureau is charged:

(*a*) With collecting, coordinating, publishing, and distributing data of all kinds which may specially interest the international South American postal service.

(*b*) With giving, at the request of the parties in interest, its opinion concerning disputed questions which may arise with respect to the provisions that refer to the relations of the South American post offices.

(*c*) With making known the requests concerning the modification of the acts of the Congress that may be formulated.

(*d*) With the notification of such changes as may be adopted.

(*e*) With making known the practical results that may have been obtained from the provisions, rules and regulations of importance that the postal administrations may adopt in their domestic service, and which shall be communicated to it as a matter of information.

(*f*) With the formation of a South American Postal Guide.

(*g*) With the making of a postal map or chart of South America.

(*h*) With the formulation of a statistical résumé of the South American postal movement, in accordance with the data that shall be communicated to it by each postal administration on the dates fixed hereinafter.

(*i*) With the compiling of a table showing the quickest routes for the transmission of mail from one to another of the contracting countries.

(*j*) And, in general, with proceeding to the studies and works that may be requested of it in the interest of the contracting countries.

(3) The International South American Postal Bureau shall be inaugurated as soon as the present convention is ratified by at least six countries.

(4) The special expenses that may be incurred in the formation of the South American Postal Guide, the making of a map or chart of South American postal routes, and the expenses caused by the meeting of a congress or of a conference, shall be borne by the postal administrations of the signatory countries in equal quotas.

The Government of Uruguay shall supervise the expenses of the International South American Postal Bureau, and shall advance to it the necessary funds.

ARTICLE THIRTEEN.—*Propositions during the interval of the meetings.*

The present convention may be modified during the interval which elapses between the congresses or meetings, following the procedure provided for in article 26 of the Convention of Rome.

In order that modifications may become operative they must secure a unanimous vote for the present article, as well as for articles 2, 3, 7, 8, 9, 11, 12, 14, and 16; a two-thirds vote for articles 4, 5, and 6, and a majority vote for article 10.

ARTICLE FOURTEEN.—*Modifications and amendments.*

No modification or resolution adopted by the contracting parties—not even those affecting the domestic order of the international service—shall be operative until four months after the date of the communication transmitted by the International South American Postal Bureau.

ARTICLE FIFTEEN.—*Transitory provision.*

The countries that now have a lower tariff than the one provided for in article 3 are empowered to maintain it in force until the next Congress.

ARTICLE SIXTEEN.—*Effect and duration of the convention and deposit of ratifications.*

The present convention shall become operative January 1, 1912, provided it is accepted by at least six of the participating countries, and will govern between these without limitation of time, each of the contracting parties reserving to itself the right to withdraw from the Union by means of a notice given by its Government to the Government of the Republic of Uruguay one year in advance.

The deposit of the ratifications shall be made in the city of Montevideo by September 30 of the persent year at latest. A certification of the deposit of ratifications of each country shall be made, and the Government of Uruguay shall send, through diplomatic channels, a copy of said certification to the Governments of the other signatory republics.

In case this convention should not be ratified by one or more of the participating countries, it shall not lose its validity with respect to the States that have ratified it.

In testimony whereof the plenipotentiaries of the countries above enumerated have signed the present convention in Montevideo on February 2, 1911.

In addition to the foregoing principal convention, a translation of the text of which has been inserted in full, rules and regulations for the enforcement and operation of same were submitted to the Congress and unanimously adopted by it on February 2, 1911. These rules and regulations, in explanation of article 3 of the principal convention referring to rates of postage, establish the following table of equivalent postage values applicable in the different signatory countries:

| | 20 centimes. | 10 centimes. | 2½ centimes. |
|---|---|---|---|
| Argentina | 10 centavos | 5 centavos | 1½ centavos. |
| Bolivia | 8 centavos | 4 centavos | 1 centavo. |
| Brazil | 160 reis | 80 reis | 20 reis. |
| Chile | 12 centavos | 6 centavos | 2 centavos. |
| Colombia | 4 centavos gold | 2 centavos gold | ½ centavo gold. |
| Ecuador | 4 centavos | 2 centavos | ½ centavo. |
| Paraguay | 40 centavos | 20 centavos | 5 centavos. |
| Peru | 8 centavos | 4 centavos | 1 centavo. |
| Uruguay | 4 centesimals | 2 centesimals | ½ centesimal. |
| Venezuela | | | |

The sum of 20,000 francs annually has been fixed for the operation and maintenance of the International South American Bureau. If



THE POSTAL CONGRESS IN SESSION AT ATHENEUM HALL, MONTEVIDEO.

this sum should not be sufficient, the Government of Uruguay is empowered to solicit from the postal administrations of the other contracting countries such additional quotas as may be necessary for the needs of the bureau, the quotas of Argentina, Brazil, Chile, and Uruguay being double those of Bolivia, Colombia, Ecuador, Paraguay, Peru, and Venezuela.

Each of the participating countries has been requested to furnish the International South American Bureau with a postal guide, a map or chart showing its domestic and foreign postal routes, and complete inter-American postal statistics. The bureau will deliver to each of the continental offices and to the international office at Berne three copies of all the documents published by it and will prepare the works of the congresses or conferences and furnish the necessary documents for the formulation and distribution of amendments, resolutions, and other reports. The director of the bureau has the right to attend the sessions of the congresses or conferences and to take part in the discussions, but is only entitled to vote when he is a representative of some one of the countries belonging to the Union.

A money-order convention was entered into on February 2, 1911, and received the unanimous approval of the Congress. This convention must be ratified not later than September 30, 1911, and will become effective on January 1, 1912. Under this convention money orders can only be sent to the different countries through the exchange offices designated by the respective postal administrations. The value of these money orders will be determined in gold, and the monetary unit for their reduction to the money of the country is the franc. Each country has the right to fix the rate of conversion, taking the franc as the monetary unit, and is obligated to advise the different postal administrations of the rate adopted. No money order shall be issued in excess of 1,000 francs, nor for a smaller sum than 25 centimes of a franc, and payment shall be made in gold, or its equivalent in the money of the country. Money orders issued under this convention are valid for a period of six months from the expiration of the month in which they were issued, and if not presented for collection within that time the paying office will notify the office of issuance. A commission of one-half per cent will be charged by the issuing office. Money orders may be issued by telegraph and arrangements may be made to have them paid at the domiciles of the parties in whose favor they are issued, and for this service no charge shall be made in excess of 20 centimes of a franc.

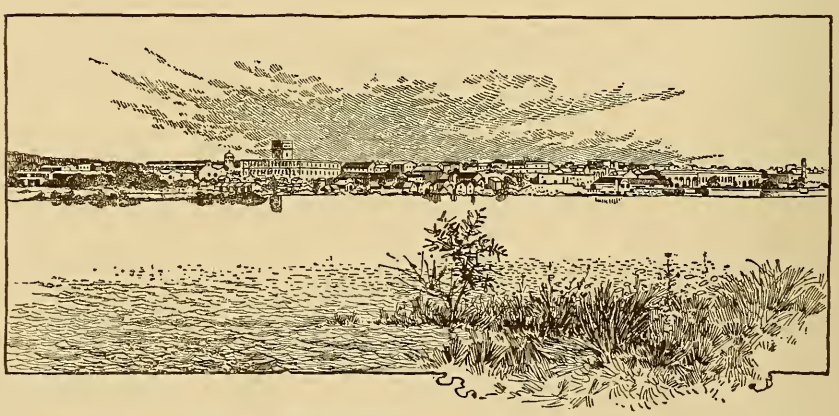
Detailed instructions concerning the application, issuance, advice of issuance, payment of the money orders, etc., are contained in the rules and regulations adopted by the Congress on February 2, 1911, for the putting into effect the money-order convention.

One of the most important acts of the convention was the adoption on the last day of its session, by a unanimous vote, of a parcels-post convention, providing for parcels-post packages with a maximum weight of 10 kilos, but allowing any country that so desires to limit the weight to 5 kilos, a double charge being collected on parcels exceeding 5 kilos in weight. Under this convention each postal administration has the right to collect on postal parcels sent to or coming from its offices an additional charge of 50 centimes on parcels weighing up to 1 kilo; 75 centimes on parcels weighing more than 1 and up to 5 kilos; and 150 centimes on parcels weighing more than 5 and up to 10 kilos.

An indemnity, in case of loss of a parcel weighing over 5 kilos, shall not exceed 50 francs, and 10 months are given in which to make claims for losses, and the post office which fails to reply to claims investigations in which it is interested, within the period of time referred to, will be declared responsible for the loss.

The rules and regulations governing the parcels-post convention, adopted by the First South American Continental Congress on the last day of its session, prescribes that the maximum volume of a parcels post is 50 cubic decimeters for parcels requiring sea transit, and 216 cubic decimeters for parcels requiring only land transit, and the measurement is not to exceed 60 centimeters.

The Congress decided to negotiate with the shipping companies with a view to securing a remission of the transit fees for conveying postal matter between South American ports, and provisions were made for the prevention of the circulation by post of obscene post cards, pictures, and books.



# AMBASSADOR BACON'S LUNCHEON TO HIS LATIN-AMERICAN COLLEAGUES

ON the occasion of the anniversary of WASHINGTON's Birthday on February 22 last, Hon. ROBERT BACON, the United States Ambassador to France, tendered a most enjoyable luncheon at the Embassy in Paris, to the representatives of the American Republics in France.

In welcoming the guests, Ambassador BACON speaking in Spanish said:

GENTLEMEN: A year ago on celebrating the birthday of the venerated "Father of the Republic," which I have the distinguished honor to represent, I had the pleasure to address you, attempting on that occasion to express my thoughts within the narrow limits of my scant acquirements in the beautiful Castilian language. The benevolent good will which you then accorded my risky experiment gives me courage to renew my endeavors in the same line, praying your indulgence for the mortal sins which, without doubt, I am about to commit against your grammatical law, crimes of linguistic *lèse majesté*, and pardon for my rash action in thus invading foreign territory.

Here in this great country of France, which all of us, sons of the co-Republican States across the sea, esteem and love as the nurse of the exiled of all the world, always ready to lavish her maternal affection on cosmopolitan birds of passage, and especially to those who like ourselves suffer exile, not for our crimes but for our high diplomatic virtues, we Pan Americans constitute a special colony segregated from others by geographic association and by identical political interest, being also closely united by common aspirations and a common brotherhood. The occasion which brings us together to-day represents, as we ourselves do, the Pan American spirit. Honoring the memory of WASHINGTON, we honor in like manner the immortal fame of all the heroes of western liberty. For ourselves, WASHINGTON is and always will be a model type, just as your BOLÍVAR, SAN MARTÍN, O'HIGGINS, SUCRÉ, HIDALGO, MIRANDA, and many others, are types of the highest virtues of an exalted patriotism, for these with heroic abnegation, strangling all selfish incentives and disregarding every motive of personal gain, devoted their lives to the supreme emprise of emancipation of the western peoples and the building up of great States endowed with all the rights and faculties of the most complete nationality, rich in the secure possession of complete independence, opulent in the elements of natural wealth, united among themselves by mutual interests, inseparable by reason of common origin and political conditions, and able each one of itself to hold an honorable place in the fraternity of world nations, and to take part as equals, which they are, in the councils of the great countries.

Great was the part played by those distinguished actors in the stupendous drama of the creation of popular governments, great the motive which impelled them to superhuman efforts for the realization of their inspired ideals, and great the accomplishment which has recompensed them in seeing the new Republics grow and become strong on the road to prosperity, justice, and peace. Blessed forever be the memory of those great creators of States, and may God grant that we drinking at the same fount of pure patriotism may, so far as we are able, emulate their virtues and contribute



Photograph by Harris-Ewing.

HONORABLE ROBERT BACON,

United States Ambassador to France.

each in his legitimate sphere to the well being of his own country and to the tightening of the bonds which unite the sister countries. Nothing appears to me more in keeping than that this tribute be offered to those immortal men at the time when the greater number of the Republics of our America celebrate with feasting and rejoicings the first century of its birth to a free and independent life, with all its duties and all its rights, its responsibilities, and privileges.

It is but a short while ago that as a corollary to the festival of its independence there was celebrated in Buenos Aires the Fourth Pan American Conference, in which was felt the sympathetic influence of the desire to better understand one another and to draw nearer together by means of the unification of projects in which all find themselves equally interested and in which all may seek the common welfare.

Gentlemen, I toast the Pan American spirit.

His Excellency Señor Don MANUEL M. DE PERALTA, the Minister of Costa Rica to France, in behalf of his Latin American colleagues, responded as follows:

Mr. AMBASSADOR: In the name of my honorable colleagues from Latin America, and as the eldest among them and on my own behalf, on this occasion it falls to my lot to have the distinguished honor of greeting the representative of the great Republic on this the day on which is celebrated the birth of WASHINGTON, its immortal founder, and to pay as a tribute to the memory of that distinguished man, perhaps the greatest in the annals of history as proclaimed by Lord BROUGHAM, the homage of our veneration.

We cherish the most profound confidence that his most noble example and his doctrines, always alive in your country, will contribute more and more every day to strengthen and unite fraternally with you all the hearts, all the peoples, and all the States who aspire to acquire through work and through liberty the benefits of the most advanced civilization.

Your country has known how to honor on every occasion, as you yourself have just done, Mr. Ambassador, the heroes and founders of our Spanish America, SAN MARTÍN, BOLÍVAR, O'HIGGINS, MÍRANDA, and MORELOS. On our part you may count on the most cordial and affectionate reciprocity.

Praise be to WASHINGTON and a toast to those worthy heirs of his traditions and to his eminent successor in the White House.

The following were present as guests of Ambassador BACON:

Señor Don MANUEL M. DE PERALTA, Minister of Costa Rica; Señor Don GEORGES SYLVAIN, Minister of Haiti; Señor Don PUGA BORNE, Minister of Chile; Señor Gen. TOMAS COLLAZO Y TEJADA, Minister of Cuba; Señor Don FRANCISCO LEONTE VASQUEZ, Minister of the Dominican Republic; Señor Don ISMAEL MONTES, Minister of Bolivia; Señor Don ENRIQUE RODRIGUES LARRETA, Minister of the Argentine Republic; Señor Don JOSE Y. LIMANTOUR, Minister of Finance of Mexico; Señor Don FRANCISCO DE ARCE, Chargé d'Affaires of Guatemala; Señor Don J. A. JIMINEZ, Chargé d'Affaires of Panama; Senhor F. BOCAYUVA, Chargé d'Affaires ad interim of Brazil; Señor Don DE LA FUENTE, Chargé d'Affaires ad interim of Peru; Señor Don DORN Y DE ALSUA, Chargé d'Affaires ad interim of Ecuador; Señor Don HENRY VIGNAUD, former Secretary of the American Embassy in Paris; Mr. ELMORE ROBERTS, of the Associated Press; Mr. WM. PHILIP SIMMS, of the United Press Association; Mr. C. INMAN BARNARD, Correspondent of the New York Tribune; Mr. WM. RICHARD HEREFORD, Correspondent of the New York World; the Consul General of the United States, Mr. FRANK H. MASON; the President of the American Chamber of Commerce in Paris; Mr. B. J. SHONINGER; Col. A. BAILLY-BLANCHARD, Secretary of the Embassy; Maj. T. BENTLEY MOTT, Military Attaché; Lieut. Commander HENRY H. HOUGH, Naval Attaché; M. GUSTAVE SCHOLLE, Second Secretary of the Embassy; M. PENNOYER, Private Secretary to the Ambassador.

# RECEPTION OF MINISTERS OF CUBA AND ARGENTINA.

THE BULLETIN has much pleasure in extending a hearty welcome to the two new members of the Latin American diplomatic corps, Señor Don ANTONIO MARTÍN RIVERO and RÓMULO S. NAÓN, the newly accredited Ministers from Cuba and the Argentine Republic, respectively. Both of these distinguished gentlemen have rendered long and faithful service to their respective countries, and their appointment to this post marks a signal honor in their careers.

On Tuesday afternoon, April 11, the official reception of the new Ministers by President TAFT took place at the White House. The ceremonies were characterized by the simplicity and dignity which attend such occasions, while the interchange of expressions of good will and friendship between the Ministers and the President gave the exercises a most pleasing personal tone.

In presenting his credentials Minister RIVERO said:

MR. PRESIDENT: It affords me great satisfaction and the highest honor to place in your hands the letter by which my Government accredits me to the Government of the United States as Envoy Extraordinary and Minister Plenipotentiary of the Republic of Cuba, and the letter of recall of my distinguished predecessor Señor FRANCISCO CARRERA JUSTIZ.

At the same time I execute the mandate of our Hon. President, Gen. JOSE MIGUEL GOMEZ, cordially to salute you in his name and reiterate to you the affection and esteem that the Government and people of Cuba entertain toward the Government and people of the United States, and their wishes for the happiness and aggrandizement of this nation to which we are bound by the closest moral and physical ties, and also for your personal happiness, Mr. President, in whom the Cubans always find a loyal and justice-loving friend.

In the discharge of my delicate mission, it will always be my purpose, Mr President, to make those ties closer by enlarging the commercial and social relations of the two nations; my knowledge of the interest in and affection for my country of which you have given many proofs, the attention for which I have been so thankful to you not long ago when I had the opportunity to appreciate in person your high gifts of statesmanship, and the nobility and rectitude of your character inspire me with the confidence that I shall enjoy your benevolent cooperation to that end, and in all this lies the assurance that my Government may rely on your effective assistance in the guarantee of peace, liberty, and independence.

President TAFT replied as follows:

MR. MINISTER: Recalling most agreeably your former residence in this capital in the capacity of Secretary of Legation of the Republic of Cuba, I receive from your hands with especial satisfaction the letter of President GOMEZ accrediting you as Envoy Extraordinary and Minister Plenipotentiary of Cuba to the United States.

As you have justly remarked, our countries are united by the closest moral and material ties. It has been and will continue my steadfast purpose to conserve those ties with a view to the maintenance of the excellent understanding now existing between our Governments and to the consolidation of the commercial and social relations which unite the people of our Republics. In this purpose I feel assured, Mr. Minister, of your cooperation and of that of your Government.

I shall be gratified if you will convey to President GOMEZ my sincerest wishes for the prosperity of the people of Cuba and an expression of my cordial regard for himself.

In accepting the letter recalling your predecessor from his post, which I shall answer at an early date, I desire to make known my appreciation of the courteous relations which he maintained with the officers of this Government during his residence in this city.

Trusting, Mr. Minister, that your sojourn here may be agreeable to yourself and feeling confident that it will prove satisfactory to both Governments, I bid you welcome on your return to this Capital.

Shortly after, on the same afternoon, Minister NAÓN was received by the President, and presented his credentials, with the following remarks:

MR. PRESIDENT: In presenting the letters of recall of my distinguished predecessor, I have the honor to place in your hands the letters of credence by which the President of the Argentine Nation has appointed me in the capacity of Envoy Extraordinary and Minister Plenipotentiary near your Government. I earnestly hope in the performance of my duties to thoroughly fulfill the instructions of my Government, whose purpose to further strengthen, if possible, the traditional close friendly relations which bind our two countries, will always have in me a most enthusiastic and convinced coworker. Our political institutions were shaped after the admirable organization by which the American States gave solidarity to their Union in 1789; the principles of your eminent legal lights, and the jurisprudence of your Supreme Court, have constituted, and still constitute, our highest authority in the interpretation of our original Constitution or when it is necessary to extract from its text the Argentine constitutional doctrine. The lives of your great heroes and statesmen are to us almost as familiar as they are to you; your political customs and civic education, your administrative organization and the enormous progress attained by the United States in the different spheres of human activity, are a constant source of attention and study, admiration and praise, to my country. The people of the Argentine Republic, in short, watch and observe the people of the United States, following step by step their marvelous development with that deep, earnest interest inspired by the triumphal march of those preceding chronologically in the struggle for the conquest of that ideal which, in the light of Argentine aspirations, is the realization of the highest and noblest of human destinies.

The growth of our commercial interchange, as well as that of our intellectual bonds, already so efficiently initiated by distinguished professors from your universities, will continually help to increase the great moral and material interests that bind us, and which I have been especially directed to advance. I am confident that for the development of those interests I can count on the support and good will of your Government, which has given our country so many and eloquent proofs of good will.

Before closing, it is my pleasant duty, Sir, to offer you, on behalf of the President of the Argentine Nation, the expression of his kind consideration for your personal welfare and for that of your Government, as well as the assurance of his admiration for this great sister Republic, whose wonderful aggrandizement and strength in the struggle for universal progress are the immediate ideal of my country.

In reply to the Minister's remarks, President TAFT said:

MR. MINISTER: It gives me pleasure to welcome you to Washington and to accept from your hands the letter which accredits you as Envoy Extraordinary and Minister Plenipotentiary of the Argentine Nation near this Government.

The well-known friendship you bear the United States makes doubly gratifying to me the words of friendly appreciation to which you have been so good as to give expression, both on your own behalf and on that of the Argentine people, in referring to the institutions and development of the United States. On our part we have watched with unmixed pleasure the steady progress and growth of our sister Republic in the south under a constitution and with political institutions whose close historical relationship with those of the United States you have described. This similarity of the institutional bases of the two Governments could not fail to promote that interchange of political ideas and aspirations which has contributed in no small degree to the laying of the firm foundation of mutual understanding upon which the friendship and good will existing between the two countries has been enduringly placed. To draw still closer the bonds of friendship that unite our two countries and to cultivate to an even higher degree the cordial relations so happily marking the intercourse between the two Governments and peoples is my desire; and you may feel assured of my sincere and hearty cooperation in all endeavors you may put forth toward this mutually beneficial end.

The good wishes of the President of the Argentine Nation for the prosperity of this country I most heartily reciprocate, and I should be glad if you would be the medium of conveying to him my thanks therefor and the expression of my high appreciation of the friendly sentiments which you have voiced in his name, assuring him of the like feelings which I entertain for him and for the Government and people of the Argentine Nation.

In receiving the letter of recall of your predecessor, due acknowledgment of which I shall take an early occasion to make in writing, I desire to express my appreciation of the uniform courtesy and consideration which, during his residence at this Capital, distinguished Mr. PORTELA, whose constant efforts in behalf of closer relations largely contributed to bring into existence new interests uniting our two countries.



# FOREIGN COMMERCE OF THE DOMINICAN REPUBLIC IN 1910[a]

STATISTICS covering the foreign commerce of the Dominican Republic for the year 1910 have just been received by the Bureau of Insular Affairs of the War Department of the United States, prepared by the General Receiver of Dominican Customs, WILLIAM E. PULLIAM.

In every way the commercial returns, as revealed by these trade statistics for 1910, were extremely encouraging. For the year there were entered the highest totals yet attained in the values of both exports and imports. A fact worthy of special note is that the values were much in excess of those of any previous year. The revivifying effect to commerce generally of the new tariff rates soon brought about a return to normal trade conditions, marked by a decided increase in many lines and the opening of others. With due allowances for the high range in process of all classes of merchandise, which everywhere characterized commercial transactions in 1910, nevertheless the greater showing in imports represented a noticeable gain in volume of goods purchased abroad. For the same period exports similarly increased. There was abundant evidence of the positive results accruing from a widened industrial effort in the country within very recent years. All principal crops, with the exception of leaf tobacco, increased, and the same observation is true practically of each one of the minor articles of raw materials which Santo Domingo offers for export. The year recorded the banner sugar crop of the country, for which product prices higher than ever before were realized. Imports amounted to $6,257,691, an increase of $1,831,799 over 1909, and the gain in the value of exports was $2,735,943, in a total of $10,849,623 for that branch—the comparison being with the year preceding. The difference, $4,591,932, between the two export and import values indicated constituted a decidedly favorable balance of trade, or stated another way, the value of exports was 57 per cent greater than the declared outlay for imports.

| | |
|---|---|
| Total value of the aggregate foreign trade of the Dominican Republic, 1910 | $17,107,314 |
| Total value of the aggregate foreign trace of the Dominican Republic, 1909 | 12,539,603 |
| Gain in 1910 | 4,567,711 |
| Gain of 1910 over 1908, $14,164,262 values (highest previously recorded). | 2,943,052 |

[a] Values stated in American gold. Comparative tables are with 1909.

The steady trade development in the Republic may be better appreciated from the statement that within five years the volume almost has doubled, which emphasizes anew the significance of material returns when orderly pursuits engage the attention of the large part of the population, and commands again merited consideration for future possibilities.

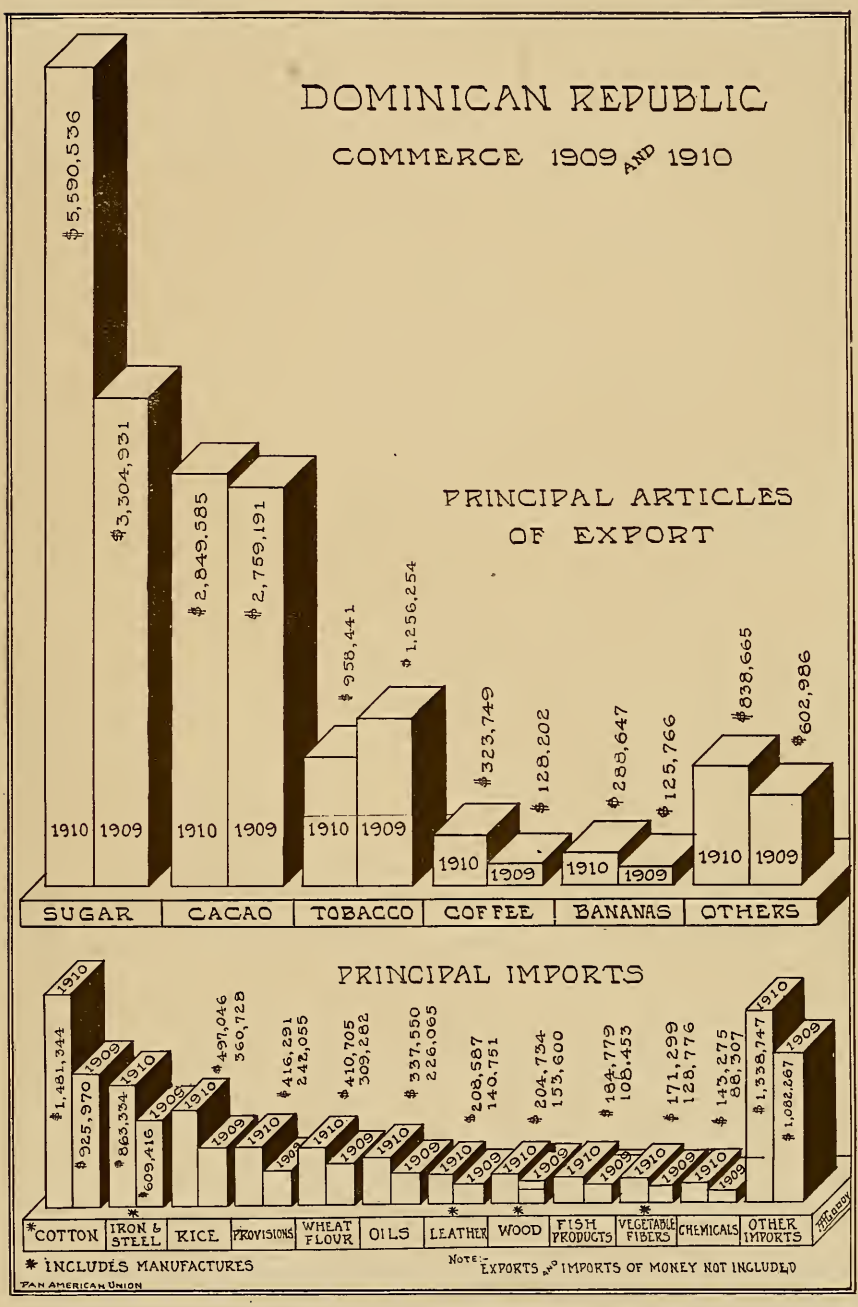


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HON. W. E. PULLIAM,

Receiver of Customs of the Dominican Republic.

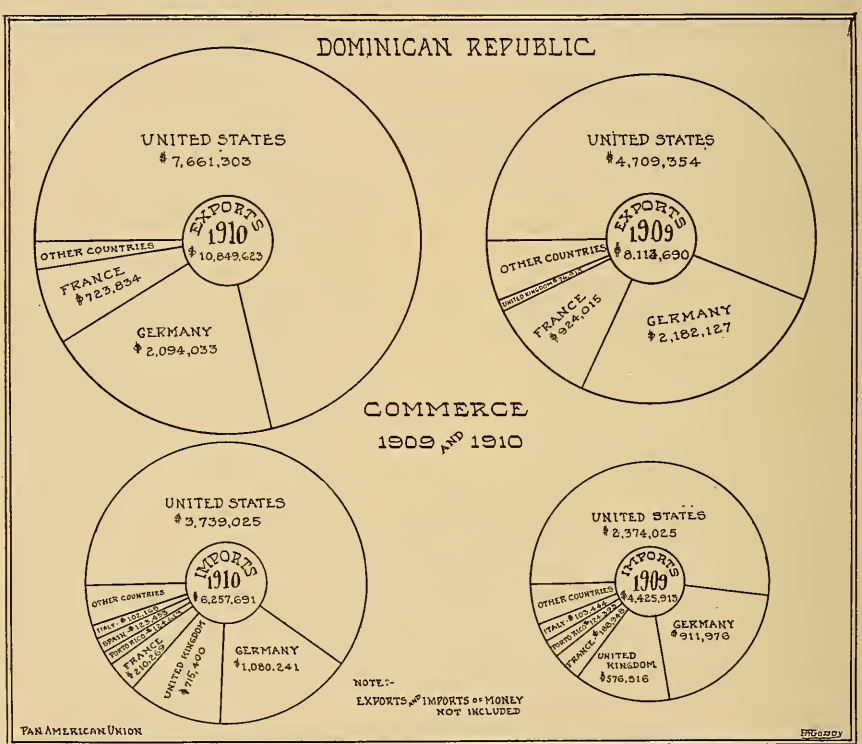
Customs collections from all sources yielded for the Dominican Republic in 1910, $3,203,426.86, an increase of $164,712.20, or 5.42 per cent over 1909. Duties on imports amounted to $2,924,778.27, a gain of $354,010.42, or 13.77 per cent in comparison with the period corresponding immediately preceding, whereas the export customs duties were but $196,863.54, nearly one-half, or, to be exact,


DOMINICAN REPUBLIC
COMMERCE 1909 AND 1910
PRINCIPAL ARTICLES OF EXPORT
$5,590,536
$3,304,931
$2,849,585
$2,759,191
$958,441
$1,256,254
$323,749
$128,202
$288,647
$125,766
$838,665
$602,986
1910 1909 1910 1909 1910 1909 1910 1909 1910 1909 1910 1909
SUGAR CACAO TOBACCO COFFEE BANANAS OTHERS
PRINCIPAL IMPORTS
$1,481,344
$925,970
$863,334
$609,416
$497,046
360,728
$416,291
242,055
$410,705
309,282
$337,550
226,065
$208,587
140,751
$204,734
153,600
$184,779
108,453
$171,299
128,776
$143,275
88,307
$1,338,747
$1,082,267
*COTTON IRON & STEEL RICE PROVISIONS WHEAT FLOUR OILS LEATHER WOOD FISH PRODUCTS VEGETABLE FIBERS CHEMICALS OTHER IMPORTS
* INCLUDES MANUFACTURES
NOTE:- EXPORTS & IMPORTS OF MONEY NOT INCLUDED
PAN AMERICAN UNION

$156,382.14 less, representing 44.27 per cent, than in the calendar year 1909.

The two principal returns indicated above portray in a very forceful manner the practical results of the application of the new Dominican customs tariff during its initial year, as it went into effect January 1, 1910.

Notwithstanding notable reductions in import schedules, particularly on articles of prime necessity, trade was stimulated thereby so that the volume of business expanded to a degree that permitted of actual and substantial increase in customs duties for the year. With




the fiscal improvement noted came a decided advantage to the people, who thus were enabled to obtain at better terms commodities and staples required for daily use.

The shrinkage in aggregate of export duties was deliberately planned. The new tariff law contains as one of its export provisions a rate of $1 per 100 kilos on cacao, a reduction of 53 per cent from the former exaction. This legislation by the Government was very timely, as it has given encouragement to the cultivation of one of the country's principal crops, and the one, too, that heretofore and at present supplies the bulk of the export duties collected, from which

it is safe to infer that the loss in revenue will be more than offset by benefits accruing to a large class of the inhabitants, who have received an impetus to supplement their industrial efforts in this direction.

The extremely satisfactory showing in customs collections enabled the Government to apply an increased amount toward the service of the refunded bonded national indebtedness. As provided by the terms of the American Dominican Convention, $1,200,000 was transmitted and deposited for the purpose stated, and in addition, at the close of the year, when the total annual returns were compiled and it was seen that the aggregate customs revenue, from imports and exports, was $3,121,641.81, the surplus over $3,000,000 was divided as decreed by the convention. One-half of it, $60,820.90, was transmitted for sinking-fund purposes, thus making a total of $1,260,820.90 which was set aside out of the customs collections of 1910.

Receipts of money and shipment of such from the country were in smaller quantities than customary. The net result of these transactions was an increase to the circulating medium, as but $21,725 was exported as against the larger total of $53,400 brought in. The items mentioned consisted of American gold or its equivalent, all from and to the United States.

## COTTON.

Cotton is a new element in Dominican commerce. In common with other portions of the West Indies, Santo Domingo possesses a very profitable cotton area. But it has lain idle until within the last two years, when a start was made in the cultivation and marketing of this universally demanded staple. Cotton, therefore, is contributing its portion as an increase to the natural resources of the country, for land has been found thoroughly adapted and is being used for cultivation that formerly remained untilled. Returns, so far, are both satisfactory and significant. While the quantity of cotton exported was not great, yet the relative increase in acreage and yield has been such, during the course of but two years, the natural conclusion is warranted that this staple speedily will take place as a product of magnitude in connection with the other commodities grown in Santo Domingo.

Two districts are well adapted to the cultivation of cotton: The Province of Monte Cristi, extending along the Haitian frontier, and the vicinity of Santiago de los Caballeros, a portion of the fertile Cibao country. A distinct dry season prevails in the Monte Cristi district, and this has proven very helpful to cotton growing. So far the industry is in its experimental stage, but the prospects for its future could hardly be brighter. All elements combine to make it a poor man's crop. and this feature alone accounts for the marked interest displayed



CUSTOMHOUSE IN SANTO DOMINGO.

in its cultivation. Small growers are the ones who are raising the fiber. As land is available and easily obtained and actual cash returns can be realized after a matter of six months, this field of labor has attracted a class of people who formerly were idle—a most healthy sign for the uplift and advancement of the country. The natives have become interested and express their entire satisfaction with the comparative quick returns from their labor. A constant demand for the raw cotton is to be found at Monte Cristi and Puerto Plata, the shipping points at which cotton gins are in operation and the produce baled for export. Price paid at Monte Cristi has been $4.50 per 100 pounds.

During 1910 the total cotton exports amounted to 62,622 kilos, valued at $17,674, of which the port of Monte Cristi shipped 47,335 kilos, value $13,962; Puerto Plata, 14,531 kilos, value $3,574. Minor transactions made up the balance of the total. The full meaning of the above commercial returns may be well understood in connection with the foreign-trade movement of the country when it is recorded and considered that the production and exportation of cotton from Monte Cristi in 1910 more than doubled over the year preceding. All conditions have continued propitious, so that indications for the future are very encouraging for this recent factor in Dominican business enterprise.

With reference to the combined foreign trade of the year, the United States maintained the position of commercial supremacy, the total with that country reaching $11,400,328, a decided gain over the year before. It is proper to state in this connection that the showing is somewhat misleading, because of the fact that a large part of the sugar exported to the United States did not go into consumption there, but was transshipped on later dates to more profitable markets, principally those of the United Kingdom.

The same comment applies to cacao shipments, made originally to New York but subsequently diverted to European ports. On the side of imports the United States supplied more than all the other countries collectively that participated in the trade. Germany occupied the second position, with an aggregate value of $3,174,274, which also was an increase. Of the other two countries that enter as leading factors in these statistical returns, were France, with a declared value of $934,103, and the United Kingdom, $857,347. This last-mentioned figure in reality is subject to a very large addition, to represent values of Dominican sugar received, though the cargoes of which at time of lading were manifested for New York. Spain, Italy, Cuba, and Porto Rico were other countries that appeared in the year's trade, although their respective transactions were of a lesser order.

EXPORTS.

To the United States cargoes were exported at a declared value of $7,661,303, or 70.61 per cent of the whole; to Germany the exports represented a value of $2,094,033, or 19.33 per cent; while France's proportion was much less, only to the extent of $723,834. English receipts of commodities from this country were considerably in excess of those revealed by the returns in this summary, and for that reason necessary explanatory footnotes have been inserted at appropriate places to the tabulated statistics involved.

*Sugar (91,330 tons; value, $5,517,202).*—The sugar industry of the Dominican Republic received a great impetus in 1910 by the grinding and marketing of the banner record crop, for which, too, top-notch prices were obtained. The crop season yielded 680,805 sacks, and the sugar exported within the calendar year weighed 91,330,618 kilos. Each of the centrals in the respective districts—Macoris, Santo Domingo City, and Azua—increased its output over any similar corresponding period. It is a significant fact in this connection that the greater return per given area of cultivation testified in the strongest manner to the advantages enjoyed by the Dominican sugar enterprise with regard to soil fertility compared to land of like nature in either Cuba or Porto Rico.

*Cacao (16,603 tons; value, $2,849,585).*—Exports of cacao surpassed in bulk those of the year before by more than 10 per cent, although the effects were still felt of the disastrous inroads made by the insect which attacked the growing product during the earlier period. The year 1910 must not be taken as a normal year for Dominican cacao, for with favorable conditions and the increased and increasing acreage devoted to this important industry, the returns from cacao cultivation shortly will attain to larger proportions than in the past. Three countries—the United States, Germany, and France—were the exclusive purchasers of this article. The first-named received more than one-half, but some of it went subsequently to meet European demands. To American markets, 8,566,286 kilos, declared value of $1,509,333, were exported; to Germany, 4,763,456 kilos, worth $793,998; and France received a less quantity, or 3,271,547 kilos, entered at $545,960.

*Tobacco, leaf (10,098 tons; value, $958,441).*—The exportation of leaf tobacco of the various grades did not equal that of the year preceding. The falling off was 161 tons, and prices obtained averaged less than those immediately before. Germany continued to be the almost exclusive buyer of the staple, receiving 9,503,724 kilos, with a declared value of $890,831, out of total exported 10,098 tons, value $958,441. American and French markets took some Dominican tobacco, but in very small lots. From the quantities and values

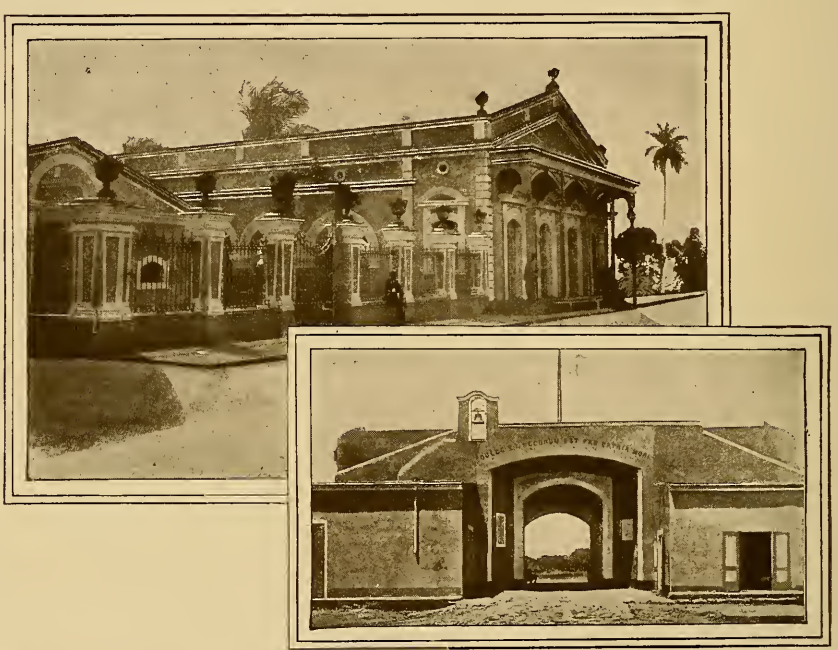
stated above the comparatively low price is clearly indicated. As yet improved methods in tobacco cultivation in the Dominican Republic have not been introduced on any general or systematic scale, hence the natural result of inferior quality. In fact, there is little range in grading between the wrapper and filler tobacco, which would account for the low price, about $95 a ton, realized.



COLUMBUS PARK, SANTO DOMINGO, DOMINICAN REPUBLIC.

*Coffee (2,064 tons; value, $323,749).*—Dominican coffee was another staple for which a marked gain in exports was recorded. While not of magnitude when considered in connection with the world's supply, the output shows signs of expansion, which will become accentuated if fair prices rule. In the past the drop in quotation for coffee has had the effect of discouraging the growth and cultivation of the article.

In 1909 only 699,580 kilos, valued at $128,202, were shipped abroad. During the year 1910 the transactions in this line about trebled. However, considerable of 1910 coffee exports came from the product of the year before, held in warehouse on speculation awaiting a rise in the market. The expected advance materialized in the early fall, so that heavy exports were effected in the closing months of the year, accounting for the aggregate value of $323,749, the largest recorded for the country. France and Germany purchased Dominican coffee in about equal quantities; to the United States 392,923 kilos were sent, and Italy also was a consumer. Small quantities were shipped



NEW MATADERO AND WEST GATE TO OLD CITY, SANTO DOMINGO, DOMINICAN REPUBLIC.

to Cuba and Porto Rico, sections in this immediate vicinity where coffee is grown.

*Bananas (578,611 bunches; value, $288,647).*—As an item of commercial interest in connection with the increased production noted generally for Dominican crops, the banana industry recovered from the setback experienced during the two years last past. The number of stems more than doubled, compared with the return from the crop preceding, and, as customary, practically this entire export went to American markets.

The five commodities discussed at some length in the foregoing paragraphs are the principal exports, and their combined values represented more than 90 per cent of the aggregate total. Of the

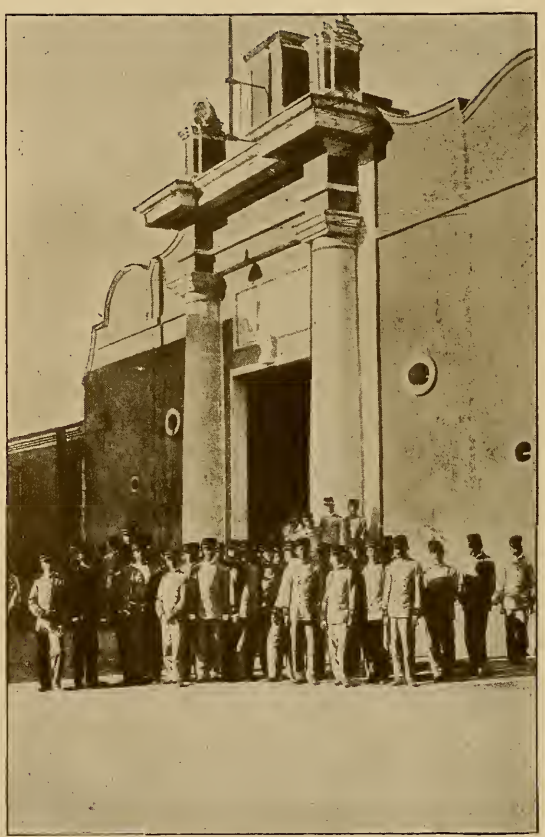
remainder, carrying a value of $811,999, the usual articles were in greater quantities than formerly, among which a few are mentioned in this narrative section.

Goatskins weighing 109,800 kilos were exported, at a value of $86,084, most of which went to the United States.

Cattle hides showed a decided increase, with a value of $123,732 for 352,667 kilos. These hides, following a trade custom of years standing, were shipped largely to Germany, with purchases of 288,700 kilos for $98,156. France, Porto Rico, and the United States, in order named, were the other consumers.

Copra is not marketed as a result of any well-defined enterprise, nevertheless it has made a large relative gain. Shipments, 176,100 kilos, were manifested for foreign ports.

Honey, in particular, is one of the lesser products to which noticeable attention is now paid in several parts of the Republic. Increased exports at good prices are in evidence as a result. Heavy exports of 129,210 gallons, value $53,322, were much in excess of similar sales in 1909. To Germany went the larger portion; the United States and France also received fair lots.



ENTRANCE TO OLD FORTRESS, SANTO DOMINGO.

Although a favored tobacco-producing country, the Dominican Republic manufactures comparatively few cigars and cigarettes, except such as go into home consumption. Tariff rates are sufficiently high to prevent competition from without. Small exports of cigars and cigarettes, valued at $22,103, comprised the total for the year, but the business was considerably greater than in the year before.

Very prominent among the minor exports is wax; 269,702 kilos of the product were sold to foreign markets, at a declared value of

$148,804. Germany received 163,914 kilos, the United States 74,319 kilos, and France 30,179 kilos of the total.

Lignum-vitæ, the well-known tropical hardwood, has figured in the trade of the country for many years. It was exported in 1910 in



PICKING CACAO PODS, DOMINICAN REPUBLIC.

increased quantities over 1909 transactions. Of 4,191 tons exported, 2,078 tons were shipped to England and 1,216 to the United States.

Full particulars of the few remaining export items, including mahogany, may be referred to in the statistical tables accompanying.

IMPORTS.

The increase of $1,831,778 recorded for imports over the year preceding was well distributed among the several classes of merchandise that enter into this trade and are regularly imported. A prominent cause contributing to a greater volume of import business was the more favorable tariff rates which become effective January 1, 1910.

*Cotton, manufactures of; value, $1,481,344.*—This principal item of import increased by $555,374. In no other branch of imports were the beneficial effects of the tariff changes more pronounced. By the equalizing of many rates and reductions in others the outcome was a decided gain. As in the previous years the United States led in cotton sales, but its gain was very significant, with a total value of $822,785, or more than double previous years' transactions with that country. From the United Kingdom came cotton goods to the extent of $452,963, and Germany held third position, having sales of $109,364 to her credit. To a much lesser degree, France, Spain, and Italy were the countries of origin for cotton manufactures received in the Republic.

*Breadstuffs (wheat flour, barrels 196 pounds each); value, $410,705.*—A decided gain of more than 25 per cent in the value of this staple corresponded to an increase of 18,275 barrels for the year. American flour, as in former years, predominated, with shipments invoiced at $400,678.

*Iron and steel, manufactures of; value, $863,334.*—This schedule of statistics embraces articles which held position of second importance in the import trade. There was a big gain of $253,918 over 1909. Building activity in evidence during a comparatively recent period, and the last year in particular, has created a greater demand for iron and steel parts necessary for construction and improvements. Within this same group the item of barbed wire for fencing is placed, and its value reached the considerable portion of $54,190 for 1,026 tons, principally of American make. The United States with a declared value of $631,461, and the United Kingdom $152,773, supplied the major portion of iron and steel manufactures.

*Leather and manufactures of; value, $208,587.*—An increase of $67,836 resulted. The total value shown above indicates to what extent this trade developed during the twelve months' period. From the United States, which furnishes the larger portion of boots and shoes received in the Republic, there was an invoiced value of $177,734. The next ranking country to furnish leather supplies of various kinds was Germany, with $15,291 to its credit. Importations of small magnitude came from Spain, France, and Italy, in the order named.

*Oils; value, $337,550.*—Oils of various classes for both table and industrial use were received in larger quantities than ever before.

The revised tariff rates undoubtedly had a salutory effect on this trade. American oils, in the main for illuminating and manufacturing purposes, represented a value of $296,752. Oils from other countries were imported in small quantities, with the exception of Spanish olive oils, for which a steady demand exists. These were valued at $20,258.

*Rice, 10,652 tons; value, $497,046.*—As rice is one of the staple articles of food in the Dominican Republic, the larger bulk, by 1,866 tons, brought in for consumption would indicate improved conditions generally. Germany continued to supply the major portion of the demand, shipping rice, weight 9,657,574 kilos, valued at $450,370;



HEAVY GROWTH OF PINE NEAR JARABOCOA, DOMINICAN REPUBLIC.

but, as pointed out in previous similar reports, the staple thus obtained is of oriental origin, transshipped at German ports. The United States furnished the cereal to the value of $14,053, and the next contributors after Germany are reported under the head of "Other Countries," from whence came 524 tons, having a declared value of $23,491.

*Sugar and confectionery; value, $96,545.*—With a decided increase in the total, the United States practically supplied the trade. American shipments were principally refined sugars, declared value $87,524. Balance of articles of this class, candies and similar confections, came from England and the Continent.

*Vegetables; value, $63,984.*—Shipments of the kind were chiefly vegetables in the natural state to supply an increasing local demand. An analysis of the statistics corresponding furnishes interesting data to the effect that of canned vegetables, in former years not introduced on account of heavy tariff exactions, 16,356 kilos were imported, at a cost of $3,445. While the amount was not large, it is undoubtedly a forerunner of what will develop into a considerable import item. The principal countries furnishing vegetables were: United States, value $28,839; Spain, value $12,492; Porto Rico, value $14,212. Of the last-named section it should be stated that many of these goods were of United States origin.

*Wood, and manufactures of; value, $204,734.*—Importations of wood and manufactures thereof augmented during the year. This mer-



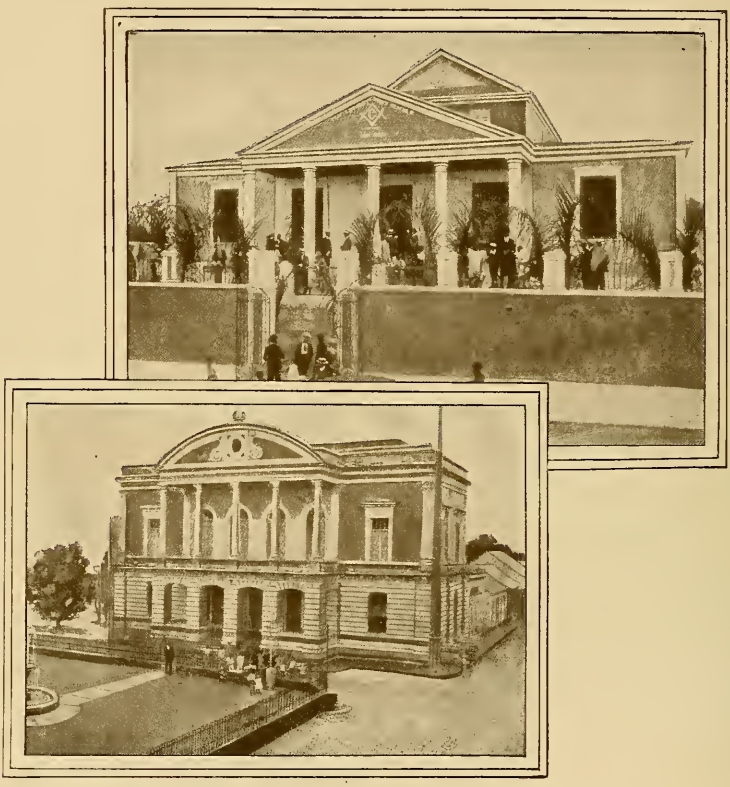
CENTRAL PARK, LA VEGA, DOMINICAN REPUBLIC.

chandise embraced a wide range, including lumber for building purposes. The United States continued to be the country of principal shipment, and its declared value of wood exported to the Dominican Republic in 1910 amounted to $186,003, a very favorable showing in comparison with its value of $145,576 for 1909.

*Wines, liquors, and distilled spirits; value, $51,342.*—The consumption of imported wines and liquors in the Dominican Republic is inconsiderable, and of the total introduced in 1910 France supplied values aggregating $21,390, Spain $16,158, and Germany only $5,347. Small imports of the kinds also were from the United States and Italy.

*Provisions, comprising meat and dairy products; value, $416,291.*—By far the greatest relative gain in imports was that under this schedule. While the increase was $174,236, or 72 per cent over 1909,

when declared value was $242,055, the United States practically doubled its business, with shipments aggregating $207,710. Germany was next in importance and supplied provisions and meat shipments to the Dominican Republic of a value of $107,871. The favorable showing in this line especially is subject to the qualification in regard to the higher prices for foodstuffs that prevailed in the world's centers during the year. However, the greater demand and supply were so pronounced as to admit of a wide margin of legitimate business expan-



NEW WORLD LODGE BUILDING, CITY HALL, SANTIAGO, DOMINICAN REPUBLIC.

sion. This was still another branch that benefited by the new tariff rates and the conspicuous part they exerted in extending trade.

*Malt liquors, beers (in bottles); liters, 451,498; value, $88,669.*—A reduction of about 53 per cent in existing customs tariff on bottled beer compared with the previous law made possible a more favorable market, the result of which was increased imports. Germany, as anticipated, made better sales, with a total value of $75,910. American beer, invoiced at $9,465, was the only other item of importance in this kind of beverage.

*Fibers, vegetable, manufactures of; value, $171,299.*—Much larger receipts for these articles followed as a result of a bumper sugar crop, necessitating great quantities of vegetable fiber sacks for containers. There was a division of the business between the United States, Great Britain, and Germany, which countries furnished values of $74,439, $45,375, and $35,206, respectively.

*Fish, preserved, and fish products; value, $184,779.*—Among foodstuffs was a large supply of preserved fish, etc., representing a creditable increase compared with similar imports of the year preceding. Of this total shown, the United States sold fish products of various kinds; cost to importers, $168,945. Shipments from Germany, France, and Spain were comparatively small.



PUERTO PLATA, LOOKING TOWARD THE SEA.

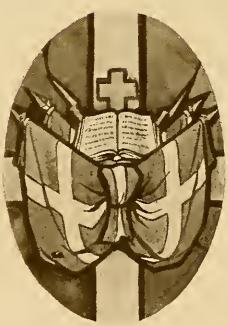
*Chemicals, drugs, and dyes; value, $143,275.*—Compared with 1909 values ($88,307), the showing for this class of goods was a decided advance. Drugs comprised a large percentage of the total receipts. American sales increased materially, with a value of $93,740. France was an active competitor, and her orders represented $31,562, while German drugs and medicines were purchased to the extent of $10,859.

Values of some of the less important items of import from the several countries were: Coal, $49,625; earthen, stone, and china ware, $21,234; fruits and nuts, $27,390; glass and glassware, $34,627; grease and grease scraps for soap stock, $40,092; hats and caps (largely from Italy), $58,245; metals, and manufactures of, $31,799; paints, pigments, and colors, $34,277; paper, and manufactures thereof,

$74,465; perfumery and cosmetics, $34,995; rubber, manufactures of, $23,254; soaps, $75,560; umbrellas and canes, $23,408; vehicles, $51,019; and under the statistical heading "All other articles not elsewhere specified" were grouped values aggregating $266,432 that, as in other similar commercial summaries, embraced a wide range of wares and merchandise in exchange between countries.

*Carrying trade—Nationality of vessels engaged.*—Vessels of American registry brought imports to the value of $3,518,151. Next ranked German vessels, which transported merchandise valued at $1,796,823. The showing for French vessels was less, with cargoes valued at $387,996; British vessels having transported larger cargoes, represented by $225,733. Cuban, Dominican, and Dutch vessels also participated.

On the side of exports, ships flying the American flag took from the country values of $3,779,996; the next factor was Norwegian vessels, having to their credit aggregate values of $3,125,049; third were German vessels, with exports valued at $2,205,771; the fourth on the list were British vessels, on which exports were shipped manifested at $1,021,368; fifth were French registries to the extent of $427,255. Cargoes of small value were laden on Dominican, Cuban, and Spanish vessels.



# THE SOUTHERN COMMERCIAL CONGRESS

THE Southern Commercial Congress, which was held at Atlanta, Georgia, March 8–10, and to which editorial reference was made in the last issue of the BULLETIN, was a great success, and especial credit is due not only to the officers of the organization who arranged it, but to the representative citizens of Atlanta, who did everything they could to provide for the hospitality of the guests and visitors. In response to a great many requests which the Director General has received, he quotes below portions of the address which he delivered on this occasion, entitled, "Get ready for the Panama Canal."

"Get ready for the Panama Canal" should be the motto and the slogan of the South for the next three years. If this Conference were called for no other purpose than to consider why and how the South should get ready for the canal, it would have a great work before it. With full respect for the other questions to come before this gathering, it is no exaggeration or asumption to insist that the greatest opportunity and responsibility now before the South is that of getting ready for the canal. And yet there is no subject of importance which is more unappreciated and neglected.

Not as a pessimist, but as a student of actual conditions, I predict disappointment and even disaster to the South, following the opening of the canal, if it does not at once sound the alarm "Get ready for the Canal" and then proceed to get ready! In other words the South generally is not only going to be deeply and sadly disappointed in the direct results and benefits expected from the canal unless it gets ready, but it may experience disaster to a thousand special industries and interests which will fail to realize profits and returns from the commerce of the canal because they made only theoretical and not actual preparation for its opening.

The adjournment of this Conference should be marked by a determination of every delegate present to return to his home town or city and organize a "Get-ready-for-the-Canal" movement. If this suggestion, which is simple and practical, is actually followed, it will mean an increase in one year after the canal is used of $50,000,000 in the export and import trade of the South and of $200,000,000 in five years! Why not, then, adopt this suggestion instead of passing a great number of resolutions which are not worth the time they take in writing and the paper upon which they are written. Let this great gathering—the greatest of its kind in the history of the South—signalize its meeting by the crystallization of the sentiment: "Get ready for the Canal" into action which will grow and spread until the whole country is awake to the imperative vital necessity of now getting ready for the canal.

The people, the papers, and the statesmen of the United States, I fear, are being misled and deceived. They fool themselves into thinking that appropriating money, doing great engineering work, accomplishing mighty sanitary changes, listening to wonderful speeches on the new power, influence, and commerce which the canal will bring to the United States, reading editorials and articles lauding American pluck and courage, mean "Getting ready for the Canal." What a disillusionment will come in 1915, if the "getting ready" is not at once made more comprehensive and practical.

If you ask me what I mean when I say "Get ready for the Canal," I will reply with the question: What have your city, your commercial organizations, and your representative manufacturing, exporting, and importing firms actually done to get ready for the canal? Have they studied intimately and comparatively the vast and virgin field of trade exchange which will be suddenly opened to them by a direct sea route when the canal is completed? Have they investigated the essential laws and conditions of supply and demand? Have they found out what the people want to buy and sell? Have they familiarized themselves with the competition of European and even Asiatic merchants? Have they looked into the climatic, physical, material, and industrial characteristics of these numerous resourceful lands bordering on the broad Pacific and about to enter upon a marvelous new era of progress and prosperity?

Were I to hold a catechism here to-day of the thousands of delegates present at this huge Conference called to help the South's progress, I do not believe that one-half of 1 per cent of them could answer accurately and interestingly practical questions on those points covering the 12 countries whose mighty coast line, reaching 8,000 miles south from the California-Mexico boundary to the Straits of Magellan, will for the first time have direct communication with the United States through the canal. In other words, I do not believe that one-half of 1 per cent of the commercial and industrial interests of the great Southern States of the United States are taking any of these steps enumerated to "Get ready for the Canal."

The situation is deplorable and must be changed. It is more important to the South than reciprocity—more essential than a Tariff Board—more vital than any issue before Congress, unless it be that of now regulating the tolls which must be paid by vessels using the canal. If any extra session is called the commercial organizations of the country should unite in urging Congress to pass this measure, which Colonel GOETHALS strongly recommends, providing for the fixing of tolls upon tonnage. The failure to take at once this practical step in "Getting ready for the Canal" will mean that shipping and steamship companies, both the United States and foreign, must delay their plans for the construction of new vessels, overhauling old ones, organizing new companies, and otherwise, both generally and specifically, "Getting ready for the Canal." There is barely time now to make and carry out new plans, and if Congress defers its action, such delay may mean a loss of many millions of dollars to our commerce through the canal.



# BOOK NOTES

**Random Sketches in Spanish-American Literature. I.—Recent Additions to the Literary History of Chile:**[a] "*Cuadro Histórico de la Producción Intelectual de Chile.*" Jorge Huneeus Gana. Santiago. 1910. "*La Novela en Chile.*" L. Ignacio Silva. Santiago. 1910.

It is with supreme pleasure that we welcome these two works, the results of the serious studies of their learned authors. They fit splendidly into the general plan of the literary studies of Spanish America, and must prove to be invaluable auxiliaries to the historian of the literature.

The former comes to us as an introduction to, and the first volume of the "*Biblioteca de Escritores de Chile,*" established by decree of the late President Montt, dated November 10, 1908, and modified in some details by a subsequent decree of May 19, 1909.

Sufficient praise can not be given to those learned societies and Governments that for years have been publishing and republishing works of general interest which otherwise might have slumbered perpetually in manuscript, or lingered obscurely in meager and rare editions. Series like the "*Biblioteca de Autores Españoles*" and the various "*Colecciones de Documentos Ineditos*" have been of inestimable value to the student. We therefore heartily applaud the step taken by Chile to preserve for us the best works of its eminent writers. The Chilean Government commands a certain sum of money which has been utilized, and which will continue to be employed for the publication of such works, and by his decree President Montt systematized and placed upon a solid basis the continuation of this laudable enterprise.



ALBERTO BLEST GANA.

A commission, composed of the Minister of Public Instruction, the Dean of the Faculty of Letters, the general secretary of the University of Chile, the Director of the Biblioteca Nacional, and of five other persons, directs the selection and publication of works. Only those posterior to 1810, and by dead authors, are incorporated into the collections. No edition may be less than 3,000 copies, of which a large number is to be distributed gratuitously to learned societies and libraries, while only a small proportion remains for sale.

The work on my table, serving as an introduction to the "*Biblioteca,*" forms a neat cloth-bound octavo volume of nearly 900 pages. The author, Señor Jorge Huneeus Gana, is a member of the permanent commission, besides having filled important official and diplomatic positions at home and abroad. As an author he enjoys a well-earned reputation by his numerous works on jurisprudence, political economy, history, and literature. Of particular interest abroad are his "*Estudios sobre España,*" and his "*Coleccion de cuentos y novelas cortas.*"

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[a] By Charles Warren Currier, Ph. D.

For years he has been studying the intellectual activity of his country. He writes:

> The more I advanced the more interesting, copious, and worthy of study the matter appeared to be, and I was surprised to find no work giving us its history or a fair *critique*, either analytically or collectively, excepting the colonial period, the least interesting, of which the complete history has been written by José Toribio Medina.

At the time of the last revolution he furnished an incomplete sketch of Chilean literature to the *America Literaria* of the Argentine writer, Francisco Lagomaggiore, and since then he has prosecuted his studies with unswerving fidelity, giving us their results in the present beautiful volume.

The first and smaller portion of the work is devoted to colonial literature, education, poetry, history, theology, and miscellaneous writings. Such poets as Ercilla, Oña, Alvarez de Toledo, and historians like Ovalle, Rosales, and Olivarez, with theologians like Gaspar de Villaroel, are briefly treated.

The principal merit of the work, however, lies in the history of the period of independence, by its collection of details which could not otherwise be found by the scholar, except with great labor and difficulty. However, the revolutionary period that, owing to the troubled times, was necessarily barren throughout Spanish America, is not overlooked. But it is the period subsequent to the day of independence which furnishes an inexhaustible theme. Few countries can exhibit such a galaxy of brilliant writers as Chile can in proportion to its size. Names like those of Bello, Rodriguez, Lastarria, Eyzaguirre, Errazuriz, Barros Arana, Domeyko, Blest Gana, Blanco Cuartin, Walker Martinez, and a host of others are, and they will remain, bright stars in the literary firmament of their country, spreading their light to the whole of Spanish America.

Although necessarily brief, the history of Señor Huneeus is complete, not the least of its merits lying in the synthetical passages, which give us critical views of the development and various stages of the literature. The chapters on the "press," "eloquence," and "the stage," three great factors in modern life, introduce us to the center of the political arena, and bring us into contact with the various influences that have made Chile what it is to-day, and caused it to reach a period of marked prosperity, through many and serious vicissitudes. We become acquainted with illustrious men and women, some of whom enjoy an international reputation, while others, if they are more obscure, are thus, not through lack of merit, but for want of a wider field of action. The stage, the pulpit, and the field—in other words, the *milieu*—are essential requisites to the greatness of actor, preacher, or commander.

The provincial actor might have been a Booth had he been able to act in St. Petersburg, London, Paris, or New York, while many a country clergyman has lived and died unknown who might have been a Lacordaire had he commanded the pulpit of Notre Dame.

A valuable adjunct to the work under consideration, and quite in harmony with its title, though alien to the field of literature, is its last chapter, on "The Fine Arts in Chile." Little more than half a century old, Chilean art now occupies a respectable position in the æsthetic world, with works from such painters as Pedro Lira, and sculptors like Nicanor Plaza, and with an Academy of the Fine Arts.

In the history of Spanish-American literature the novel belongs preeminently and, in fact, almost exclusively to the period of independence. Señor Huneeus devotes a chapter to the Chilean novel. This interesting subject, the outlines of which are sketched in this work, is more extensively and *ex professo* treated in that of Señor Ignacio Silva, "*La Novela en Chile.*" This bibliographical essay, in a 12° volume of over 500 pages with paper cover, owes its authorship to the director of the library of the Instituto Nacional, the college in which students are prepared for the university, and which has counted among its directors some distinguished men, like Manuel Montt, afterwards President of the Republic.

The work is essentially bibliographical, although its copious and critical notes give to it a decidedly literary tone, which render it of inestimable value to the historian of Spanish-American literature. It embraces within its scope not only novels in the strict sense, but also all manner of stories, legends, traditions, and other similar writings of an historico-literary character. The author's position as librarian has greatly facilitated his labors, in which he has been engaged since 1902, for the library of the Instituto Nacional is rich in Chilean and American works generally. Señor Silva has succeeded in collecting over 130 titles of different novels for the library, and his work gives us 489 titles of various editions. He has been fortunate in having had the opportunity of consulting rare editions and a number of books owned by individuals. His arduous and constant labor may be evidenced by the fact that he has personally read almost entirely the works of which he treats. An alphabetical index at the end of the volume enhances its value and serves to facilitate literary research.

The authors are arranged alphabetically, rather than chronologically, which is somewhat of a disadvantage to the literary historian. This arrangement, of course, diminishes the value of the alphabetical index, while a chronological sequence would have exhibited to greater advantage the historical evolution of the Chilean novel. As it is, the student is obliged to wade through much material in order to coordinate his data.

Chilean fiction is less than 70 years old, beginning in 1845 with a story based upon truth, by Wenceslao Vial Guzman, whose "*Life of a friend and a first love*" was printed in the pages of *El Progreso* in 1846. Bernabé de la Barra followed, in 1848, with his "*Emma y Carlos.*" Such works, however, were only the flickering of the dawn. The day does not break until 1852 with Manuel Bilbao, one of the first novelists of note, whose historical novel, "*El Inquisidor mayor ó historia de unos amores,*" made considerable impression and went through several editions. It is a pen picture of colonial Lima; but the heroine, a sort of modern Hypatia, though attracting one's sympathy, can hardly appeal to the Christian sense of the reader, typifying as she does the rationalistic spirit of eighteenth century philosophy.

The greatest of Chilean novelists, and by some regarded as the foremost in Spanish America, is Alberto Blest Gana. Born in 1831, and beginning his literary labors at the age of 26, he has preserved his intellectual vigor from his first novel, "*Engaños y disengaños,*" in 1858, to his latest production, "*El Loco Estero,*" in 1910. He is the national novelist of his country and the founder of a school, drawing his characters with their analysis from the everyday life that surrounds him. As an historical novelist he has been compared to Walter Scott, with even greater dramatical effect than that produced by the works of our great Scotchman; but his first inspiration came from Balzac. The motives that have guided his pen are contained in the words of a letter addressed to his friend, Benjamin Vicuña Mackenna, when he writes:

> I have pursued my object without becoming discouraged by indifference, irritated by criticism, or elated by the applause that my latest novels have elicited. The secret of my perseverance lies herein, that I write not for glory, which is not to be sought in this country, nor for the love of money, as only of late have my works begun to be of pecuniary benefit, but from a certain necessity of soul, from irresistible attraction, by that immaterial something that drives you to separate yourself from the petty cares of life, and raises your imagination to a sphere where none may rob you of the delicious fruits of intellectual satisfaction.

There are two other Blest Ganas in Chile, who have attained to some reputation as novel writers, namely, Alberto's brother, the poet, Guillermo, and Luis Blest Gana. The followers of Alberto Blest Gana are too numerous to mention, but I may here allude to two other writers who have attained eminence, Daniel Barros Grez and Vicente Grez. The former, a man of wonderful versatility, philologist, archæologist, ethnologist, historian, poet, mathematician, engineer, and architect, is especially known as a novelist in the historical field. Generally speaking, his

works, overburdened with erudition, have, with one exception, not been quite successful from the standpoint of art. The exception is "*Pipiolos y Pelucones*," which has been regarded as an historical novel of a true type, and equal to the best of ALBERTO BLEST GANA.

One of the most distinguished of the disciples of ALBERTO BLEST GANA is VICENTE GREZ, whose works seem worthy of the master. VICENTE appears to have been considerably influenced by the realism of the modern French schools.



VICENTE GREZ, 1843–1909.

Though not in harmony with all opinions expressed by the authors to whom I have devoted this space, I sincerely welcome their works, the one literary, the other biographical, as valuable additions to the history of the literature of Chile.

The work of Señor SILVA gives us a charming bird's-eye view of the field of Chilean fiction. Looking down upon it, we behold writers—good, bad, and indifferent—blended in picturesque confusion, while his critical notes enable us to select the best of them, and estimate their works at their true value.

Books like those of HUNEEUS and SILVA are paving the way for an elaborate history of the literature of Chile. In fact, the former, covering as it does the whole field, is a synoptical history. Should each Spanish-American Republic produce works of a similar character, the day is not far distant when we shall enjoy the advantage of a complete history of Spanish-American literature.

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**Diaz. Master of Mexico.** By JAMES CREELMAN. New York, D. Appleton & Co., 1911. 422 p. Plates. Size, 5½ by 8½ inches. *Price, $2.*

Before taking up an extended review of this most timely book, we will quote the concluding paragraph of the preface:

> The object of this work is neither to attack nor to defend, but to explain, the *most interesting man* of the most misunderstood and misrepresented country in the world.

[We have placed the italics.]

While there may be large differences of opinion as to the merit of the present governmental policy of Mexico, adverse criticisms being due in a large measure to misinformation, still there can be no gainsaying the tremendous interest aroused by a study of the career of the man who personifies the progress of his country in the record of his own achievements.

PORFIRIO DIAZ has been the "man of the hour" in Mexico from the moment he swung down the rope from his convent prison in Puebla to the present period of minor disturbance. He has been called the greatest man of the century by one who has tasted greatness, and if the making of a nation is the measure of greatness, then none other of this day has more claim to the superlative.

Here is a significant phrase that we quote, in spite of the danger of misinterpretation, for it contains the sum of the problem of the people which DIAZ the statesman is striving to solve, with an indication of his tentative solution:

> There can be no sounder statement than that a free country is not a mechanism, but an organism in which every cell is conscious; and it follows that until prolonged peace, education, and industry completely develop the intelligence and absorb the energies of the mass of the Mexican people, the guiding idea of Mexico should be found in President DIAZ's abrupt but practical motto, "Less politics and more administration."

Mr. CREELMAN has given us much in the way of a history of Mexico, thus at once stamping himself as understanding the complex nature of his work, for the story of the Ruler, one-quarter Indian and three-quarters Spanish, is so identified by heritage, education, and environment with all that Mexico means that it would be but faintly possible to arrive at a true judgment of what DIAZ has accomplished without a knowledge of what has gone before.

The present state of society, in whatever country, is surely a heritage of the past, and it is, perhaps, because the Anglo-Saxon often forgets this that he so readily criticises the civilization of his neighbors, and the question of heritage is nowhere of more materialness than in a consideration of the civilization of Mexico:

To understand how DIAZ made a peaceful and prosperous nation out of the Mexican people it is well to defer the story of his picturesque and thrillingly adventurous youth and know something of the heterogeneous human elements that were poured, crushed, but unmelted and unassimilated, into the uncongenial mold of democracy by an earlier patriotism innocent or forgetful of the fact that self-government after the fashion of Anglo-Saxon peoples is an inheritance as well as an achievement.

Not only are fifty-five native tongues spoken to-day in the Republic, but there are still standing t e ruins of thousands of palaces, temples, and forts whose histories were already forgotten when the discovery of America was followed by the Spanish conquest of Mexico.

In the peninsula of Yucatan alone these often majestic and richly carved ruins, built by the primitive Mayas, include more than ten thousand, and possibly a hundred thousand, hewn-stone structures, most of them representing architecture of singular and noble beauty. Many of the temples, palaces, and forts are buildings of immense size and massiveness. Some are set on the top of lofty truncated pyramids. These mighty ruins, chiseled before metal tools were known in America—at least no trace has ever been found of any but hard stone instruments—stretch over hundreds of miles of almost desolate country. They were but the public structures of a people whose dwelling huts turned to dust in the prehistoric age. It is estimated that the ancient population of the Yucatan Peninsula alone may have been 20,000,000 persons. To-day it is less than 400,000, including Campeche and Quintana Roo.

This peninsula is only a fourteenth part of the territory of the Mexican Republic, which has an area of 767,259 square miles and is as large as the combined soils of France, Austro-Hungary, England, Ireland, Scotland, Italy, Holland, Portugal, and Belgium. Yet the evidence of an antique and highly developed civilization among the Mayas is so vast as to strike the beholder into awe. For strength as well as imaginative richness these memorials of vanished American culture challenge the stateliest ruins of Egypt, China, or India. The wrecked grandeur of Chichen-Itza and Uxmal is more tragically mysterious than Delhi or Luxor. It is difficult to understand why this wonderful country has not drawn the American traveling public in multitudes to its thrilling scenes of vanished civilization.

There can be no doubt that the Mayas are orientals. Their faces, heads, and bodies, their manners, habits, and ways of thinking, alternately suggest, like their wonderful ruins, China, Korea, India, Japan, Java, and the Malay Peninsula.

The matchless ruins of Mitla, standing in mute loveliness in the lonely Oaxaca Valley, suggest in their dim frescoes, monoliths, and mosaic walls of cut stone memories of the architects of the Nile Valley. The prehistoric sculptures of PALENQUE in Chiapas; the monstrous pyramid of Cholula, in the wide Puebla Valley where CORTES and his armed men saw a city with 400 temple towers and promptly slew 6,000 of its inhabitants; the immense pyramids of San Juan Teotihuacan, near Mexico City, with their buried treasures of carved green jade, obsidian knives, masks, terra-cotta heads, and other primitive objects, bearing designs irresistibly suggestive of early Egypt—from mountainous Sonora, in the northwest, down through 2,000 miles to the very frontiers of Guatemala the astounding remains of civilization left by the Mayas, Zapotecs, Toltecs, Otomies, Chichimecs, Totonacs, Tlaxcalans, and other peoples who built cities with temples and palaces, and had organized governments and religions many centuries before the discovery of America by Europe, all bear witness to the fact that the present Indian population of Mexico is descended from races and civilizations that came from across the seas.

The tremendous importance of this lies in the fact that probably 80 per cent of the present native inhabitants of Mexico are Indians or part Indians. There are varying theories of the relative proportions of white and Indian blood in the country, but no reliable figures. President DIAZ'S own estimate gives about 20 per cent of pure white blood to Mexico. Archæologists who have spent their lives studying the ancient ruins; ethnologists who have analyzed the mental, moral, and physical traits of the living populations; statesmen and scholars who have searched out and compared their political tendencies and capacities; and religious leaders who have tested their spiritual understandings and inclinations—all these admit that the precise origin of the Mexican Indians and the manner of their journey to America are mysteries which only dreamers or charlatans pretend to solve. But practically all authorities agree that these Indians are the descendants of Orientals who built the majestic ruins which are at once the wonder and despair of archæology—the greatest and most fascinating mystery of human history.

There is so much of the adventurous crowding the early life of PORFIRIO DIAZ that the unbiased historian invites the criticism of being eulogistic, for in truth the hazards

and risks of this man's early rise makes thrilling reading; but it is not so much the ruler in the making that interests the sociologist, rather what laws he has evolved for governing the land whose destinies he may direct.

Mr. CREELMAN paints this side of the picture all too lightly. What President DIAZ has done to create a school system and his constant efforts toward the betterment of all educational facilities throughout the Republic means more to the thinking mind than the strategy of his many skirmishes.

The judgment of a man whose work has been done in a very vortex of individual impulses merits close attention when dealing with human nature.

> Men are much the same all over the world, and nations are like men. They must be carefully studied and their motives understood. A just government is nothing more than the collective ambitions of a people expressed in practical form. True statecraft is a study of the individual man. It is the same everywhere. The individual always has a personal motive in supporting his government. The ambition may be good or otherwise, but, at the bottom, it is personal. The beginning of real government is the discovery of what that motive really is, and statesmanship should seek not to defeat, but to regulate the gratification of individual ambition. It has been my aim to do that in dealing with my countrymen, who are a gentle, affectionate, and grateful people, following their hearts oftener than their heads. I have tried to know what the individual wants and expects. Even in his worship of God a man looks for some return, and how can human society expect to find anything higher in its members. Experience has taught me that progressive government should try to gratify individual ambition as much as possible, but that it must provide an extinguisher to be used when individual ambition burns too fiercely for the general good.

The tinge of pessimism now seems justified.

Mr. CREELMAN's book is a fair and just treatment of the subject, and because of his exceptional opportunities of investigation should stand as an authoritative work.

The book has a neat simple binding, is well printed and illustrated.

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**Notes on Soil and Plant Sanitation on Cacao and Rubber Estates.** By HAROLD HAMEL SMITH. London, John Bale, Sons & Danielsson, Ltd., 1911. lii, 632 p. illus. Size 4¾ by 7½ inches. *Price 10 shillings, net.*

This work, while containing the very latest information on the newest methods of cultivating cacao and rubber, may be said to be a plea for scientific management in the matter of tropical agriculture.

In the light of modern experience it is no longer contended that "farmers' sons make the best farmers," meaning practical farm work as the only initiation to agricultural mysteries; but now the up-to-date tiller of soil sends his offspring to the most convenient agricultural college, compelling a thorough knowledge of theory to be supplemented by practice at home.

The same idea is especially applicable to the study of plant life in the Tropics.

An issue raised in this book, which leads thought like a stream through the valley of consequences, is the matter of plant hygiene, and the suggestion that plant diseases be treated in a manner similar to diseases of man is an excellent one. Plant pest infection and spread should be made as much a matter of quarantine as the prevention of plague, especially in those countries that are opening vast areas to cultivation. The lesson of the boll weevil should not be without results.

The author makes a strong case for the establishment of tropical agricultural colleges, and his arguments justify the establishment of similar institutions in all Latin-American countries.

The author has much to say on the practical side of his subject as well as the theoretical, and in his volume will be found many helpful hints for tillers of tropical soils.

The make-up of the book is suitable.

**The Rubber Country of the Amazon. A detailed description of the great rubber industry of the Amazon Valley, which comprises the Brazilian States of Para, Amazonas, and Matto Grosso, the Territory of the Acre, the Montaña of Peru and Bolivia, and the southern portions of Colombia and Venezuela.** By HENRY C. PEARSON. New York, The India Rubber World. 1911. 228 p. illus. maps. Size 6¼ by 9 inches.

The heavy-caliber title of this book belies the light wit and easy style of the author in his descriptions. While a good deal of solid information is found within the covers, still it is all so skillfully woven in running comment on people and places of the Amazon country that there is nothing of the didactic in the paragraphs. Yet one learns from every page; for instance:

Breakfast is 12 o'clock noon in Para, and while I was enjoying the meal I took occasion to chat with an American commercial traveler who came to Brazil once a year. It makes me proud to see evidences of American enterprise in foreign countries, so I asked him a few questions.

"Do many commercial travelers visit this port?"

"Lots of them," said he.

"How many American drummers are there in town at present?"

"I'm the only one," was the reply.

"How many Germans are here?"

"Eighty " said he.

After drawing a picture of Para that evolves a pleasing mental picture of the world's first rubber port the author reveals a whimsical insight into the psychology of the American abroad in telling of the arrival of ubiquitous Hamburg-Americaners.

Every winter that great educational institution, the Hamburg-American Line, gathers together some hundreds of untraveled Americans and projects them upon the people of other climes. They learn many things in the voyages; that is, they have ample opportunity to do so.

Sitting at midday breakfast in the Cafe da Paz one morning, I knew that one of these great excursion steamers had arrived, for the advance guard of the army that would soon overrun the city began to trickle in. They were a comely, well-dressed, respectable lot, and I viewed them with much interest. The self-conscious swagger (we are all afflicted with it) that the men took on because they felt that many strangers were looking at them in a foreign tongue, was most exhilarating. The half-pitying glances that they cast about were not contempt, but simply embarrassment. They were wondering in their innermost recesses what the well-dressed foreigners thought of these fine specimens of American manhood. And those foreigners, sitting erect over their breakfasts, were probably wondering what the wealthy and somewhat noisy Americans thought of the fine specimens of Brazilian gentlemen that they saw for the first time Both were self-conscious to the last degree, only the Americans showed it and the Brazilians did not.

Remembering that Manaos is a thousand miles from the mouth, the following description of that coming city of the Amazon is enlightening:

The city itself is a counterpart of what a young, rich, North American city would be that had grown up overnight. Not architecturally, of course, for the tropical world evolves a style of its own, and gorgeous colorings come without bidding and are most fitting. The public buildings were beautiful; particularly the $2,000,000 theater situated on an eminence in the middle of the city dominating all the rest. Palaces, parks, libraries, hospitals were very fine. Sandwiched in between them were waste places, old-fashioned tile residences, and much that showed the sudden growth of the city, but all this was being rapidly changed. When one considers that this city is a thousand miles from the seacoast, in the heart of a vast tropical jungle, with wild Indians within a hundred miles of it, its presence seems incredible. In a way it is as modern as New York or Chicago. The latest Parisian fashions are there, and almost anything that civilized man desires is obtainable. Prices are high, to be sure, because both luxuries and necessities are imported and subject to a duty of 100 per cent. But when something besides rubber is produced by the magnificently fertile lands that surround it, Manaos will be one of the great and beautiful cities of the world and living as reasonable as anywhere.

The author got a glimpse of the Madeira-Mamore Railroad in construction and then pushed far into the interior of the wild rubber lands. He tells his story interestingly, and while thanking him for a few hours' charming mental travel, we cheerfully recommend Mr. PEARSON's book impartially to the rubber planter or that indistinct being, the "lay reader."

The volume is handsomely bound, has numerous good illustrations, and is printed on first-class paper.

**Vorlesungs-Verzeichnis (Scheme of Lectures) for the summer semester, 1911, of the Municipal Commercial High School in Cologne, Germany.**

That a German commercial school is thorough, and theoretical as well as practical, may be taken for granted, but an interesting proof of the last quality is found in this catalogue. It announces lectures on political economy, commercial relations, finance, citizenship, geography, and products. In addition, however, there are special courses in languages—English, Italian, Spanish, Portuguese, Russian, Dutch, Japanese, Chinese, Arabic, Turkish, and Persian—all given with oral methods, and combined with exercises in commercial correspondence and bookkeeping. Many other subjects are presented, and even scientific technical problems of color, applied chemistry, and diseases are discussed. The student who hopes to enter the foreign commercial field surely lacks nothing here for good preparation.

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**Das Deutschtum in Südamerica (The Germans in South America).** By Dr. W. Vallentin. Berlin, Hermann Paetel, 1908. *Price 1.25 marks ($0.31).*

Although a book of only 112 pages, and restricted therefore to but slight description of any one country, it has great merit in the clearness with which the German emigrant movement to South America is traced, and the exactness with which the number of German inhabitants is given. Particular attention to Brazil (north, central, and south), Chile, Paraguay, and the Argentine Republic is given. The author has no hesitation in crediting South America with a wonderful future in the present century.



# LATIN AMERICA IN THE MAGAZINES

"**The Real Value of a Merchant Marine,**" by JACOB H. GALLINGER, in "*The Independent*" for March 2, is the title of a paper embodying strong arguments in favor of mail subvention.

The most partisan opponent of "special privilege" can not but admit that if the people of the United States are to get their righteous share of the benefits to trade coincident with the completion of the canal at Panama and a return in the way of an indirect dividend on the $400,000,000 invested in that project, it is only fair that ships flying the American flag should be entitled to special toll rates. But there are no ships flying the American flag.

The decadence of the American marine is a fact, and it is also a fact that the carrying trade of England, with Germany and France in a lesser degree, has battened on this decadence. The provision has been so plentiful and so easily procured that the prospect of losing it promotes a raucous chorus of petulant protest from all interested in the subsidized ships of foreign nations.

The violent outburst of opposition of the alien shipowner whenever Government aid is suggested as a means of protecting United States ships and shipbuilding is one of the strongest arguments on the side of "mail subvention."

Senator GALLINGER, who drafted a bill which provided Government consideration for American ships making ports in South America below the Equator, the bill unfortunately failing to pass the Senate, puts the case in clear and forceful language:

These new lines to South America would run to what should be to the United States some of the most profitable markets in the world. The progressive South American Republics are all of them large consumers of the products of the North Temperate Zone, but under present conditions they draw most of their imports from Europe. The chief European nations have had the wisdom to provide adequate means of mail, passenger, and freight communication. Great Britain, France, Germany, Italy, Spain, even Portugal and Sweden, have national steamship lines to South America, all aided or encouraged in some way by their Governments. It is easy for South American merchants to send their orders and receive their goods from Europe. It is very difficult, indeed impossible, for them to communicate in any quick and satisfactory way with the United States.

Argentina, with but 6,000,000 people, imports merchandise valued at $302,765,895 annually; Uruguay, with only 1,112,000 inhabitants, imports $38,643,035; Brazil imports $179,690,125 worth. Of this last year they bought but 14 per cent from the United States. Other and nearer Latin-American countries—the West Indies and Mexico—with which we have good, swift, regular communication by American steamship lines, running under the law of 1891, bought last year substantially 50 per cent of their imports from the United States. There can not be the slightest question that an adequate American steamship service would soon lift the United States into a similar commanding position in the markets farther south. From the other side of South America the story is the same. Chile and Peru, out of total imports aggregating about $125,000,000, bought only 9 per cent from the United States, because not one American steamship runs or has run for many years in regular service between our ports and the ports of Chile and Peru. For all our communication with these great purchasers we are to-day absolutely dependent on foreign shipping.

Incidentally we may remark that Argentina has now a population of about 7,000,000. This, however, does not modify in any great degree Senator GALLINGER'S statement.

Putting the case concretely, the author says this:

What department store in any American city engaged in a sharp contest for business would dream of intrusting to a rival store the delivery of its goods to its customers? Is it not the prime instinct of every successful merchant, a fundamental principle of keen competitive business, to maintain an active and comprehensive delivery service of his own? Would any merchant conducting such a business sell or lay up his own wagons, even if his competitor offered to do the work cheaper than he could do it? It would be a poor judge of human nature who would consent to such a proposition. His fellow merchants in the bankruptcy proceedings which would certainly ensue would have grave question of his sanity. Yet that stupid merchant who would turn his delivery business over to a dangerous rival rather than be bothered with it himself has one conspicuous exemplar in the person of the United States.



NEW WHARF AT PORT AU PRINCE, HAITI.

Splendid wharf of reenforced concrete now in operation at Port au Prince, considered the finest in the West Indies and the largest in the world, where the Ripley system of concrete piling has been used. The cost of constructing this harbor improvement is given at $325,000.

Mr. GALLINGER then goes on to give the reasons for the decadence of the American marine and shows how England, a free-trade country, has made it a national policy to grant annually to British ships large sums for mail service, and in this way contribute largely to the maintenance of her position as "Mistress of the Seas." He concludes with this paragraph:

The United States has reached the parting of the ways on this important question. Shall we move on or shall we rest content with our present halfway commercial growth and depend for such scant increase as we may get on the grace of the shipowners of other and rival nations? Shall we leave to our competitors in Europe and to ambitious and aggressive Japan the mastery of those neutral markets from which in a few years we shall be as surely and finally excluded as if a wall were built against our trade around the coasts of South America, Asia, Africa, and Australia? I do not believe that is the temper of the American people. I know that it is not the temper of the people of New England, or of New York, or of Pennsylvania, or of Virginia, or of the Carolinas, or of the great States fronting on the Gulf of Mexico, or of the Commonwealths on the Pacific Ocean. And if the people only once understand the question it could not be the temper of the States of the Mississippi Valley and the Middle West, whose fields and factories produce a very large proportion of our entire exports and who must very soon find an increased market for the maintenance of their prosperity. To them more than to anyone else in America is the real value of a merchant marine.

In this connection it may be suggested that nations should guard their interests with the vigilance of individuals. Of such is their wealth, development, and strength. The extinction of American shipping supremacy is naught but national carelessness

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"**The Panama Canal**," by Col. GEORGE W. GOETHALS, United States Army, is the title of an article appearing in the February number of "*The National Geographic Magazine*," and it goes without saying that no one is entitled to write with more authority on this subject than the Chief Engineer in charge of the work.

The lay reader has a general idea, rather hazy perhaps, of the difficulties and discouragements that have been ever at hand confronting those who have charge of the work on this Isthmus. As a problem which has required great thought, time, patience, and work in solving, we have the question of controlling the floods of the Chagres River. The figures which Col. GOETHALS gives us are truly enlightening.

The greatest difficulty of the Panama route is the control or disposition of the Chagres River and its tributaries. The Chagres River rises in the San Blas Mountains and drains a basin of 1,320 square miles, about half of which is above the mouth of the Obispo River. Its course is generally parallel to the Caribbean coast line, so far as the mouth of the Obispo, where it turns almost at right angles to the westward, pursuing this general course to Tabernilla, whence it traverses a tortuous channel in a general northwesterly direction and enters the Caribbean Sea to the west of Limon Bay.

The general elevation of the valley is but little above sea level to Bohio, where the low-water surface o the Chagres is 1 foot above mean tide. At the mouth of the Obispo, 13 miles from Bohio, the low-water surface is 48 feet above, and at Alhajuela, 11 miles farther, it is 95 feet above the same datum. Above Bohio the Chagres Valley is undulating, the hills becoming higher and steeper as the river is ascended, causing very rapid run-off of the rains, amounting to 100 inches and over in 8 or 9 months, the average duration of the wet season.

The maximum observed rainfall is 5.86 inches in 1 hour; the greatest recorded change in the river at Gamboa is a rise of 25.6 feet in 24 hours. Its discharge at the beginning of the rise was 8,200 cubic feet per second, increasing to 90,000 cubic feet per second at the peak of the flood. The excessive rainfall and precipitous character of the hills inclosing the valley make it a torrential stream. The bars formed during floods differ materially, and are of sand, gravel, pebbles, and rounded stones 3 inches to 6 inches in diameter. The sand and clay deposits are useful in giving suitable material for the impervious portion of the dams, while the gravel beds furnish ballast for the railroad and for other purposes.

The Chagres River has 26 tributaries between Bas Obispo and Gatun, the largest of which are the Gatun and Trinidad Rivers, the former entering from the east with a drainage basin of about 160 square miles and the latter from the west, draining an area of about 390 square miles. Each rises in the same character of country as the Chagres, and though with smaller drainage areas, they are of the same torrential character and must be reckoned with in the general question of the control of the Chagres and its tributaries.

Various methods for the disposition or control of the Chagres have received consideration. The first French company, in its attempt to cut a sea-level canal, found it necessary to provide diversion channels to care for the water of the rivers. The new Panama Canal Co. adopted the plan of a dam across the river valley at Bohio, creating a lake above this point and discharging the flood waters to the level below by means of a spillway in the adjacent hills. The canal which the President was authorized to construct by the provisions of the Spooner Act was the lock type recommended by the first Isthmian Canal Commission in its report submitted November 16, 1901. This plan also provided a lake for controlling the Chagres by a dam at Bohio, following along the plans of the new Panama Canal Co., thereby utilizing to the fullest extent the work already accomplished.

As is known, the present plan for a lock canal is the one advocated by the minority of the board of consulting engineers convened by the President to consider the question of level. Two of the given reasons for accepting the conclusions of the five members of the board was the saving in time and the saving in money in the construction of a lock canal. It is now generally admitted that the choice of a lock canal was a wise one, and even the most skeptical have at last been convinced. In this connection Col. GOETHALS says:

An English scientist, who has kept in close touch with the work since the Americans took charge, and who at first was skeptical as to the Gatun Dam, said, after a recent visit, that he was converted to the present plan because it is not a dam at all that is building, but a veritable hill. He also thought that the expressed opinion of the board of consulting engineers, with reference to the Gatun Dam, namely, "That no such vast and doubtful experiment should be indulged in," was now applicable to Culebra Cut. There are probably some who still believe a wrong choice was made, but a visit to the Isthmus is a sure cure for such cases, provided always that they are open to conviction.

A mental picture of the main features of this waterway is given in the following paragraph, which tells the ambitious traveler of the experiences he may expect when using this short cut to the western sea.

The canal which is now building consists of a sea-level entrance channel from the sea through Limon Bay to Gatun, about 7 miles long, 500 feet bottom width, and 41 feet deep at mean tide. At Gatun the 85-foot lake level is obtained by a dam across the valley. The lake is confined on the Pacific side by a dam between the hills at Pedro Miguel, 32 miles away. The lake thus formed will have an area of 164 square miles and a channel depth of not less than 45 feet at normal stage.

At Gatun ships will pass from the sea to the lake level, and *vice versa*, by three locks in flight. On the Pacific side there will be one lift of 30 feet at Pedro Miguel to a small lake held at 55 feet above sea level by dams at Miraflores, where two lifts overcome the difference of level to the sea. The channel between the locks on the Pacific side will be 500 feet wide at the bottom and 45 feet deep, and below the Miraflores locks the sea-level section, about 8 miles in length, will be 500 feet wide at the bottom and 45 feet deep at mean tide. Through the lake the bottom widths are not less than 1,000 feet for about 16 miles, 800 feet for about 4 miles, 500 feet for about 3 miles, and through the Continental Divide, from Bas Obispo to Pedro Miguel, a distance of about 9 miles, the bottom width is 300 feet.

The total length of the canal from deep water in the Caribbean, 41-foot depth at mean tide, to deep water in the Pacific, 45-foot depth at mean tide, is practically 50 miles, 15 miles of which are at sea level. The variation in tide on the Atlantic side is 2.5 feet as a maximum, and on the Pacific it is 21.1 feet as a maximum.

Provisions are made to amply protect the entrances of the canal. During the winter months occasional storms occur on the Atlantic side of such violence that vessels can not lie with safety in Colon Harbor, and during the progress of such storms entrance and egress from the canal would be unsafe. To overcome this condition, a breakwater will extend out about 2 miles from Toro Point in a northeasterly direction, which will not only protect the entrance but will provide a safe harbor. Whether protection on the east side will be ultimately necessary is still an open question.

The Pacific entrance requires no protection from storms, but the set of the silt-bearing current from the east is at right angles to the channel and the silting made constant dredging necessary. To prevent this shoaling a dike is being constructed from the mainland at Balboa to Naos Island, a distance of about 4 miles. The benefits derived from it are already very marked.

The projected lakes will submerge the tracks of the Panama Railroad for the greater part of its length, and as this road is necessary for construction purposes, and ultimately for the operation and maintenance of the canal, it is being reconstructed throughout, with the exception of a few miles at either end. It was originally intended to pass the new railroad through Culebra Cut on a berm, 10 feet above the water surface, to be left for this purpose during the excavation of the channel through the cut, but the slides and the absolute necessity for keeping open railroad communication between the two ends of the line necessitated a change in the location, and a new line to the east of the cut has been selected.

In order to hold its concession the French company continued work on the canal up to the time that the United States assumed control, and after the transfer of rights and property was formally made the excavation was carried on by the United States with the various tools and appliances then in use.

So much has already been written in reference to the wonderful sanitary improvement on the Isthmus that it is not necessary to go into this further.

The author takes up the question of "slides" and "breaks," concluding that no danger need be anticipated from this type of disaster when the canal is once completed. Most elaborate tests have been made and every precaution taken.

Referring to the most interesting question as to when the canal will be completed, the chief engineer says that undoubtedly the official opening will be held January 1,



GROUP OF SCHOOL CHILDREN AT BELLO HORIZONTE, BRAZIL.

Photograph taken on the occasion of the presentation of the United States flag and the message of greeting which the school children of Knoxville, Tenn., sent to the school children of Brazil, through Dr. Lourenco Baeta Neves. Dr. Neves was the Brazilian delegate to the International Irrigation Congress at Albuquerque, N. Mex., and to the Dry Farming Congress at Cheyenne, Wyo.

1915, but the expectation is that the locks will be completed June 1, 1913. It is only a question as to when the work on the Culebra Cut will be done.

In conclusion, Col. GOETHALS says:

Much has been said and predicted as to the commercial value of the canal to the United States. In this connection it must be remembered that the commercial shipping of this country never required the canal. The trip of the *Oregon* in 1898 settled the question of the advisability of constructing an Isthmian Canal, and had the canal been built at that time, thereby saving that trip around the Horn, there is no question that it would have been agreed generally that the canal, even at an expenditiure of $375,000,000, was worth while.

In whatever light the Panama Canal is viewed, it will have paid for itself if in time of war or threatened war a concentration of the fleet is effected without that long tedious uncertain route followed by the *Oregon*.

It will practically double the efficiency of the fleet, and, notwithstanding the fact that we are a peaceful nation, our outlying possessions make the Panama Canal a military necessity, and it must be so recognized. From this point of view the debt should be charged to the account which necessitated its construction, and whatever revenues are derived from other sources are so much to the good. The traffic that will utilize the canal depends upon the tolls that will be charged, and the President has asked the Congress for legislation which will enable the establishment of rates.

There is another policy which if adopted will have a material bearing on the revenues of the enterprise. Through the Panama Railroad a large expenditure of money has been made for providing the present working forces with supplies of all kinds. Though the railroad has been reimbursed for this plant, through fixed charges on sales, it should not be abandoned, but utilized for furnishing shipping with its needed supplies. Suitable coaling plants should be erected for the sale of coal to vessels touching at or passing through the canal. In addition, since oil is now used on a number of ships plying in the Pacific, such fuel should also be on hand for sale by the canal authorities.

The extensive machine shops now located at Gorgona must be moved before the completion of the canal, and they should be established in connection with a dry dock that will be needed for commercial purposes, and utilized as a revenue producer for the canal. This policy also needs congressional action.

With properly regulated tolls, and with facilities for fully equipping, supplying, and repairing ships, the Panama route would offer many advantages and bring to it a sufficiently remumerative return to pay not only for the operating expenses, but to gradually absorb the debt which the United States has incurred by its construction.

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"**The Panama Canal and Latin America**," in "*The South American Journal*" for February 25, 1911, treats of the possible changes in trade currents coincident with the completion of the canal, also the effect on the progress and development of Latin American countries.

The general conclusions are that those States in the immediate neighborhood of the cut will receive a tremendous impetus in commercial and agricultural development, but undoubtedly it is the countries on the west coast of South America where the greatest change is to be expected. These countries are generally spoken of as the most backward of the Latin republics, and it is unquestionably true that facilities of transportation will do much toward their advancement.

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In "*The Pan American Magazine*" for March the Peruvian Minister to Panama, Hon. FEDERICO ALFONSO PEZET, under the title of "**The Year 1915**," makes a suggestion that should be acted upon and carried out in its main features, because it is one of the best that has been put forward in the matter of a fitting celebration for the opening of the Panama Canal.

Mr. PEZET'S scheme includes three celebrations at the three ports that rival each other in the benefits they will receive with the cutting of the canal—New Orleans, Panama, and San Francisco. The idea is this:

Following out my line of thought I suggested the gathering of representative fleets from the nations of the world in American waters, in response to an invitation from the Government of the United States. The combined fleets should proceed together to New Orleans, where a great welcome would be accorded them; festivities in the Crescent City would occupy 10 or 15 days when the navies would steam out, accompanied by another fleet of pleasure craft, filled with visitors and sight-seers. They would proceed to Colon, where they would be greeted by the representatives of Pan America, gathered in the city of Panama, to ohld the Fifth Pan American Conference.

Then the stream of beautiful ships would pass through the canal, and, passing out at the Pacific entrance at Balboa, a royal salute would be fired by each vessel, each being decorated for the occasion with the flags of all nations and flying from each topmast the white flag of universal peace.

After staying here a week or 10 days and attending the festivities provided for them, the fleets and accompanying craft would proceed to San Francisco, where all would attend the great peace festival to celebrate the opening of the canal and the World's Fair, or International Exposition, dedicated to the cause of peace, good will, and the higher development of the human race through commerce, industry, and facilitated intercourse.

The Peruvian Minister to Panama further suggests that the next Pan American Conference—the fifth—be held in the city of Panama, in 1915, a date already agreed upon. He advances as an argument for the holding of the Conference there the fact that two Pan American Conferences have been held in the Northern Hemisphere and two others in the Southern Hemisphere, and therefore he thinks that the geographical situation of Panama gives it a claim to the next meeting place.

Mr. PEZET even goes further in his article and advocates peace among all nations, with the erection of a "universal peace palace" in Panama.

He concludes with the advice that the best time for the celebration would be in the month of February.

Without doubt some such plan as above outlined should be arranged, so that the opening of this wonderful waterway will be appropriately celebrated in a distinctive manner worthy of the world change which it inaugurates.

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"**Panama Canal—the End in Sight,**" by FIELDING PROVOST, appears in "*The Pan American Magazine*" for March.

In this article the author gives a résumé of the work done from the inception of this remarkable undertaking.

In "**The Slaying of the Dragon,**" in the same magazine, the different stages of the successful fight against yellow fever are described in detail.

The author begins with LAVAREN, a French army surgeon, who made many interesting investigations in the blood study of fever patients, and concludes with the work done by the American surgeons in Havana. As one of the by-products of the canal construction, we have an increased knowledge of prophylaxis, an inestimable benefit to humanity, which in itself justifies the vast cost of the work.

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"**A Harvest of Tares,**" in "*Lippincott's*" for April, is an article by FORBES LINDSAY, the well-known author and expert on Panama, in which he pictures in fiction the possibility of carrying yellow fever to the Orient when the trade routes through the canal are opened.

This is a subject that has been discussed extensively by the medical science at large, and unquestionably the necessary quarantine regulations will be taken to prevent any such direful calamity as Mr. LINDSAY foretells in his short article.

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It is exceedingly gratifying to the Director General of the Pan American Union and those who are associated with him in his work to read the accounts of the Pan American Commercial Conference appearing in the current numbers of the different trade papers. The editors of these periodicals are men entirely conversant with commercial conditions and therefore praise from them is the highest appreciation possible in any movement that had to do with trade.

The "*Exporters and Importers Journal*" for March 18 devotes several pages to a brief résumé of the work done at the Conference, while "*Commercial America*," the

official organ of the Philadelphia Commercial Museum, of which Doctor WILSON is the able head, contains an article very generous in praise of the good accomplished by this Conference. "*American Industries*" also speaks very highly of the Conference, saying that it was an event of international importance and one which it is fair to assume will have a direct and lasting influence on the future commercial relations of the United States with the countries of Latin America.

The appreciation of our friends of our work in the promotion of commerce and comity among the Latin American countries will urge the personnel of the Pan American Union to greater efforts in the pursuit of the "ideal of all America."

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In this same magazine will be found a general review of trade conditions in the countries of Central and South America that is worth the careful study of any one contemplating entering the Latin American commercial field. The material has been compiled under the direction of the National Association of Manufacturers, which is a sufficient guaranty of its accuracy.

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"**Ten Years of Argentine Trade,**" an editorial appearing in "*The South American Journal*" for March 18, discusses the wonderful growth of the River Plate country since 1901, and as straight figures are universally considered to be the best gauge of a country's prosperity, we reprint the table included in this article.

| Year. | Exports. | Imports. | Total. | Balance. |
|---|---|---|---|---|
| 1901 | £33,543,220 | £22,791,949 | £56,335,169 | £10,751,271 |
| 1902 | 35,897,345 | 20,607,851 | 56,505,196 | 15,289,494 |
| 1903 | 44,196,905 | 26,241,320 | 70,438,225 | 17,955,585 |
| 1904 | 52,831,505 | 37,461,194 | 90,292,699 | 15,370,311 |
| 1905 | 64,568,768 | 41,030,844 | 105,599,652 | 23,537,884 |
| 1906 | 58,450,766 | 53,994,104 | 112,444,870 | 4,456,662 |
| 1907 | 59,240,874 | 57,172,136 | 116,413,010 | 2,068,738 |
| 1908 | 73,201,068 | 54,594,547 | 127,795,615 | 18,606,521 |
| 1909 | 78,683,272 | 59,951,701 | 138,634,973 | 18,731,571 |
| 1910 | 73,787,337 | 69,657,555 | 143,444,892 | 4,129,782 |
| Total | | | 1,017,904,301 | 130,897,819 |

"**Cruising With the Yahgans,**" by CHARLES WELLINGTON FURLONG, appears in "*The Outing Magazine*" for April, 1911.

The atmosphere of romance ever envelopes that perilous passageway discovered to the world by the mariner, MAGELLAN, thus giving him first claim to that coveted title, "circumnavigator," and we still recall our childish shudders at tales of the wild men of the Land of Fire. This isolated tailpiece of the world, seeming to be the last connecting link between the prehistoric and the present, has ever been the mecca of scientists. The oft referred to voyage of the BEAGLE, with CHARLES DARWIN as one of the expedition, left a broad trail in this part of the globe, and BEAGLE Channel is now found on all of the charts.

Mr. FURLONG's expedition in this wild country was everything that can be qualified as sporting, and as he was in search of ethnical data, it can be also truthfully called scientific. We hope the information gained was commensurate with the risks taken, for a 10 days' voyage in an open boat with one positive and three potential murderers implies a nervous strain that it is difficult to conceive of in the comfortable confines of civilization.

Mr. FURLONG spent some time in Ushuwaia, the "jumping off place" of the continent, making this his headquarters. In addition to the dangers he ran from his



SCENE, ISLAND OF TIERRA DEL FUEGO, ARGENTINE REPUBLIC.

Though in 55° south latitude, a portion of the island abounds in thick forests. In the more open country the sheep industry prospers.

companions, nature also threatened him with her perils, as can be readily gathered from the following paragraphs:

From the north another danger threatened. Sweeping here and there cross channel were fitful, dreaded williwaws, those swirling minature whirlwinds which suddenly drop down over the mountains with cyclonic force and sweep terrifically over the water, picking it up in aerial whirlpools and spinning the revolving spray along in their courses. So tremendous is their force that they will cause an anchored steamer to surge at her chains or capsize an anchored sailboat under bare poles. I cruised later on a small vessel in Last Hope Inlet, whose pinnace was lifted bodily from the water by a williwaw, spun around a few seconds on its painter, like a top on a string, then shot below the water and sunk.

Often the only warning one has of the approach of these, when near shore, is by seeing whole areas o trees falling on the mountainside like ninepins, so fiercely does the williwaw strew its path. We dodged these williwaws, and just before the gale raced down on us, standing up and steadying the tiller between my knees, I obtained a photograph of that inimitable scene, not forgetting, however, when I turned my back on the Fuégians, to keep cognizant of their movements. A blow with a heavy ore or a shove of a powerful arm would send me forever into the icy waters.

Rush-h-h! and the gale struck us. I headed the boat before it, then brought her up a little, for to make Tierra del Fuego it was necessary to quarter. Her sail, being stepped too far forward, coupled with her great length and narrow beam, made her fail to respond quickly to her tiller and caused her to head too much into the wicked, short sea. The sudden changing of the wind-opposing current, when it first struck, stirred things into a veritable maelstrom.

Never have I experienced a wilder sight. The four Yahgans facing me were the very epitome of stoicism and grim courage. They sat firmly holding their places, clinching thwart and gunwale, their black hair blown and whifted by the wind. Their jetty, beady eyes, lit with the eternal fire of self-control, watched the dangerous seas boiling down on our quarter from behind. Occasionally their eyes would shift to me. Once Yahgaashagan's lips parted and a short-cut grunt issued through his glistening white teeth, warning me that an extra bad comber was bearing down upon us.

Twice they visibly clinched their holds more tightly to keep from being thrown out and fixed their gaze more intently upon me. How could any white man qualm before such splendid nerve and fortitude? The vicious wave bore down, struck, turned, and twisted us, seemingly both ways at once, then, in a last spasm, threw the boat on her beam ends. Those were anxious moments, when things hung in the balance. Less than a minute determined whether the passing wall of water would leave us mere specks, struggling for a few minutes until numbered stiff in the bitter, icy sea. With the greatest difficulty I held my position and handled the tiller. How we ever righted is a marvel, and, had I failed to have wedged the tiller head before starting, this account would not have been written.

In the darkness of the storm we eventually made out the gloom of great mountains above us, and shot thankfully in under their lee. It was after midnight when we landed in the little bay at Remolino, the Lawrence's ranch, where I had previously made my home. The whole lot of shepherd dogs rushed like a wolf pack down upon us as we landed, growled, snarled, and yelped at the Fuégians, but leaped about me and licked my hands in friendly recognition. I saw the Yahgans comfortably housed in a log rancho, and in half an hour was sleeping soundly in one of the most hospitable homes in the world.

We sincerely congratulate Mr. FURLONG on his safe return.

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"**Privateers and Pirates of the West Indies,**" by VIOLET BARBOUR, appears in "*The American Historical Review*" for April.

This paper is an effort to fix the responsibility for the prevalence of piracy in the West Indies, and the author makes out a strong case against the greater nations of Europe who encouraged the sea rovers in the seventeenth century. England was the most persistent offender in this matter, with France, Holland, and Portugal ably seconding her efforts.

The difference between privateering and piracy was simply the matter of a commission more or less legal (letters of marque, and reprisal). The effect on the world trade was the same. However, nice distinctions were quite apparent to the legal mind, and it is recorded that Sir HENRY MORGAN, whom we look upon as the arch pirate of this period, sued JOHN ESQUEMELING, the author of "Bucaniers of America," or at least the printer of the English edition of this book, for calling him a "pirate," whereas he was a "privateer," recovering damages to the sum of £300 or £400. He seems not to have questioned anything else said about him in the book, and the record of his deeds was black enough. The story of the life of this son of a Welsh

farmer, although described many times, is worthy of another résumé, so we quote the following:

In 1668 MORGAN received a commission from Governor MODYFORD "to draw together the English privateers and take prisoners of the Spanish nation," the pretext being the ever-current rumors of an intended invasion of Jamaica by the Spaniards. According to MORGAN's own report of his adventure, drawn up afterwards at MODYFORD's request, he and his fleet of 10 sail and 500 men were driven by storms upon the south keys of Cuba, and, being near starvation, landed to buy provisions. Meeting some French in like case, the English privateers joined them in a march across the island after the frightened inhabitants, who seem to have expected the descent. Reaching the north coast, the buccaneers attacked Puerto Principe, and, after an unusually spirited defense by the Spanish, took the town. MORGAN's account emphasizes the preparations he found in progress there for the conquest of Jamaica, and merely mentions that on the Spaniards' entreaty they forebore to fire the town or bring away prisoners, but on delivery of 1,000 beeves released all. ESQUEMELING, however, described the way in which the captives were tormented to force them to reveal the whereabouts of the wealth of the town, and places the value of the booty at 50,000 pieces of 8, which he adds, was too small a sum to pay the buccaneers' debts at Jamaica, and therefore they were forced to attempt Porto Bello.

Porto Bello was, next to Panama and Carthagena, the most important town in Spanish America, being the great market where European goods brought over by the fleet were exchanged for the products of the colonies. For the fortnight of the fair it was a great city, but during the rest of the year it was almost deserted, the climate making it not a desirable place of residence. In size it was nothing more than a village; however, the warehouses where the colonial officials and merchants stored their goods made the town rich prize at any time, and its seizure would be an insult that Spain could not overlook as she had the impertinences of the privateers at sea.

The French buccaneers refused to be party to the new enterprise, so the fleet that sailed for the Isthmus was entirely English. Landing under cover of darkness they surprised the town at 3 o'clock in the morning of June 26, 1668, and, as MORGAN explains: "Seeing that they could not refresh themselves in quiet," they stormed and took two of the castles that guarded the entrance to the port, and the third surrendered. This left the town at the mercy of the buccaneers, and they remained in it, plundering and carousing, until early in August. The president of Panama sent a force against them, but the buccaneers were not too demoralized to beat back the Spaniards, and wrung from the wretched citizens the full ransom of 100,000 pieces of 8, which they demanded for the town and prisoners before setting sail. Then, according to ESQUEMELING, occurred an incident that calls to mind some of the adventures of FRANCIS DRAKE:

"The President of Panama, by these transactions, was brought into an extreme admiration, considering that 400 men had been able to take such a great city, with so many strong castles * * *. This astonishment was so great that it occasioned him for to be satisfied herein to send a messenger unto Captain MORGAN, desiring him to send him some small pattern of those arms wherewith he had taken with such violence so great a city. Captain MORGAN received this messenger very kindly, and treated him with great civility. Which being done, he gave him a pistol and a few small bullets of lead, to carry back unto the President, his master, telling him withal, he desired him to accept that slender pattern of the arms wherewith he had taken Puerto Velo, and keep them for a twelvemonth; after which time he promised to come to Panama and fetch them away. The governour of Panama returned the present very soon unto Captain MORGAN, giving him thanks for the favour of lending him such weapons as he needed not, and withal sent him a ring of gold, with this message, 'that he desired him not to give himself the labour of coming to Panama, as he had done to Puerto Velo; for he did certifie unto him, he should not speed so well as he had done there.'"

In coin alone the spoil is said to have amounted to 200,000 pieces of 8, which was divided among the freebooters and squandered promptly on the fleet's return to Jamaica about the middle of August, 1668.

After this followed the second expedition, the details of which are so very well known. The famous buccaneer, however, threatened to embarrass the statesmen of England by his uncontrollable energy, and he was ordered to London to explain certain of his doings.

HENRY MORGAN was also dispatched to England to defend his raids on the Spanish towns, but his commission from MODYFORD proved sufficient justification for everything that he had done. He was handsomely lionized in London as the hero on whom DRAKE's mantle had fallen and amused his entertainers with stories of Spanish treasure and English adventure. At court he caught momentarily the fancy of the ing, who made a knight of him. In 1675 he returned to Jamaica as lieutenant governor of the island and commander in chief of its forces, and until the end of his life figured turbulently in local politics.

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Bearing on this same subject, that most interesting book, "**The Buccaneers in the West Indies in the XVII Century**," by C. H. HARING, was extensively reviewed in the "*Bulletin*" for March.

"**What One Practician Has Accomplished in Mexico,**" by ROBERT GRAY, M. D., Pichucalco, Chiapas, Mexico, appearing in "*The American Journal of Clinical Medicine,*" for March, tells of some of the difficulties physicians find in establishing themselves in Mexico.

"**Alkaloidal Practice in Guatemala,**" by CARLOS F. SECORD, M. D., "**A Doctor's Life in Spanish Honduras,**" by JOHN ABBOTT, M. D., and "**Conditions and Medical Practice in Bolivia,**" all deal with the life of the medical profession in these different countries, as their titles indicate. We can recommend them for the perusal of the ambitious medical student who is turning his eyes to the horizon of Latin America.

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"**The Monetary System of Honduras,**" by SAMUEL MCCLINTOCK, in "*The Bankers Magazine*" for April, is a history of the financial system of this Central American State, with the conclusions of the commission which was appointed to report upon the monetary system of Honduras, to the First Central American Conference. As these gentlemen made a long and thorough study of conditions, what they have to report is of great value, and therefore we quote it in full:

1. That the national silver dollar has disappeared from circulation almost entirely.
2. That the national fractional money, both silver and copper, is so scarce as to necessitate money from elsewhere and even token money from individuals as a substitute.
3. That the acceptation by the State of the silver dollar of other countries, inferior in some of its requirements, to the national money, results in eliminating the latter with serious prejudice to the general interests.
4. That the acceptation of fractional money from other countries is even more prejudicial since, in addition to its requirements being likewise inferior to the dollar, it is almost always true that, outside of the country of its emission, no other will accept it.

The commission made the following recommendations:

1. That the gold standard be adopted as soon as possible, as it will facilitate commerce, both domestic and foreign, and make less noticeable the fluctuations in the rate of exchange.
2. In case it should be impossible to get the five Republics to agree to establish the gold standard, there should be established, as one of the means to secure that desirable end, a unity in the coinage of the silver dollars of all the Central American Republics, with the stamp of the old Republic of Central America, sing the Mexican dollar model with regard to weight, fineness, and other conditions, and neither coining nor receiving silver dollars of any other class.
3. That each of the States be at liberty to coin fractional money, at least the 25-centavo piece, which its internal trade demands, with the weight, fineness, and other requirements which it deems convenient, the other States being exempt from the necessity of receiving it.
4. That it be agreed, as a fixed point in the monetary system of Central America, never to introduce paper money which the Honduran people have not been disposed to accept in any case.
5. That a monetary convention be entered into between the Republics of Central America and the other Latin-American States to fix the value of silver of each with reference to gold.

The first Central American Conference met in Tegucigalpa, Honduras, January, 1909, and passed the following resolutions with regard to the monetary system:

1. The basis of the future monetary system in Central America shall be the gold and silver dollar at parity.
2. The succeeding conference shall fix the date when the respective Governments shall proceed to change their respective monetary systems.
3. No foreign silver money shall be legal tender in Central America after the date fixed by each of the Governments, and after there shall exist a national money.
4. Each Government shall prescribe the conditions for the recoinage or exportation of the silver money, not national, shall fix the limit of coinage, and shall arrange for the settlement of the obligations contracted before the conversion of the system.
5. The money of Central America created by this Conference shall be composed of the following denominations: Gold pieces of $20, $10, $5, and $1; silver of 1.00, 0.50, 0.25, 0.10 cents; nickel of 0.05, 0.01 cent.

In fineness, weight, and size these moneys shall be like those of the United States. They shall bear on the face "Republica de * * *;" on the reverse, the shield of the Federation of Central America, with the legend, "15 de septiembre de 1821," and below this the denomination.

"**Presidents of the Americas,**" by MITCHELL MANNERING, short historical résumés of all the American countries, with references to the present rulers, appears in the April number of the "*National Magazine.*"

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"**American Investments in Mexico,**" by JOHN D. LONG, in "*American Industries for April,*" while giving a timely summary of industrial conditions, hardly goes into the question of American investments as extensively as we could wish.

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"**Conditions Which Govern the Type of Car for City Service—Mexico City,**" in "*The Brill Magazine*" for March, describes the difficulties to be met and overcome in the starting of the street-car system in the capital of the Mexican Republic.

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"**The Use of Lime in the West Indies,**" in the March issue of "*Tropical Life,*" is a new theory on the fertilization of the soils of Cuba.

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"**Brazil Diamond-Bearing Deposits—Minas Geraes, Bagagem, Agua Suja,**" in "*Mining and Scientific Press*" for April 1, is a short description of the diamond country of the Brazilian Republic and of the geological analogies of the soil of Agua Suja with the Kimberly district in South Africa.

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"**Peru To-day. A Geographical Sketch,**" by C. W. SUTTON, C. E., appearing in the March number of the magazine of the same title, contains general descriptive data on this progressive Republic.

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"**The Ecuador-Peru Boundary Question**" is the leading article of the South American supplement of "*The Times*" for February 28. Other special articles are: "**Rio de Janeiro,**" by ROBERTO DE MESQUITA, "**La Paz Museum,**" "**British Guiana,**" "**Ancient Peruvians,**" "**Village of the Jungle,**" "**Venezuela and Its Future: II.,**" "**Paraguay,**" and "**Progress of South America: From Buenos Aires to Valparaiso by the Trans-Andine.**"

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# SUBJECT MATTER OF CONSULAR REPORTS

## REPORTS RECEIVED TO APRIL 1, 1911.

| Title. | Date. | Author. |
|---|---|---|
| ARGENTINA. | | |
| Third municipal census of Rosario. Data illustrative of the city's rapid development. | 1910. Dec. 24 | H. P. Coffin, consul, Rosario. |
| Foreign Commerce of Argentina for 1910: Transmitting copies of newspapers of Buenos Aires of Jan. 1, 1911. | 1911. Jan. 2 | R. M. Bartleman, consul general, Buenos Aires. |
| Argentine Industrial Census: Transmitting No. 12, for the Provinces of Mendoza and Jupuy. | Jan. 3 | Do. |
| New municipal ordinance affecting theaters and other places of amusement. | Jan. 4 | Do. |
| Trade Notes: More than 1,266 miles were added to the railway systems of Argentina during the year 1910, not including Government lines under construction. New line from Rosario to Puerto Belgrano, Bahia Blanca, has been opened, and other lines in Province of Buenos Aires will be opened this year. These lines will facilitate greatly the transportation of the products of the country to the ports of the Republic. A section of a "Pay-as-you-enter" car has been on exhibition at the Railway and Transport Exposition at Buenos Aires. Time for presenting models of automatic couplings to be used on the railways of Argentina has been extended by the Government to Mar. 31, 1911. Argentine Congress approved bill authorizing the Government to spend $19,300,000 United States gold on the construction and equipment of State railways. Railway and Land Transport Exhibition was closed on Jan. 2. Work on new railway from port of San Blas to Patagones and Choele-Choele will be begun some time in January, 1911. Report of the Director General of Railways. Bill limiting the amount of baggage that may be allowed free entry into Argentina is pending in the National Congress. Agricultural Exhibition left a deficit of $192,786 United States gold. Population of La Plata on Oct. 31, 1910, was 97,651. Argentine Government has decided to work the petroleum deposits in the far south. 160 acres of land in the Department of 25 de Mayo was donated on condition that a practical school of agriculture be established thereon. | Jan. 7 | Do. |
| Argentine exports, 1910 | ...do... | Do. |
| Sugar importations, decree lowering duties on | Jan. 9 | Do. |
| Argentine crops, 1910–11: Official publication regarding | Jan. 16 | Do. |
| Opening of new hotel for immigrants in Buenos Aires | Jan. 18 | Do. |
| Statistics regarding exports of wool, 1909–10 | Jan. 20 | Do. |
| Trade Notes: Arrangements made for line of steamers between Norway and Argentina. Amount of grain exported from Argentina last year. Board of Hydraulic Works has signed contract for the construction of commercial port at Mar del Plata. Public works department of the Rosario municipality granted 2,092 building permits. Port of Santa Fe opened. Revenue of the municipality of Buenos Aires. New law courts. Aviation meet arranged by "La Nacion." Returns of the civil register of Buenos Aires. | Jan. 26 | Do. |
| Conditions of labor in Buenos Aires | Jan. 28 | Do. |
| Locusts, etc | Jan. 30 | Do. |
| New publications in Buenos Aires | Jan. 31 | Do. |
| Trade Notes: Municipal authorities have issued volume showing results of the Third Census in Rosario, taken in April, 1910. Statistics regarding population. Number of persons visiting theaters. Property owners. Value of exports in Argentine gold. Rosario to have a first-class casino. New port works of Santa Fe. Public lands in the Province of Cordoba. | Feb. 5 | H. Coffin, consul, Rosario. |
| Trade Notes: Argentine consul in Canada reports that steamship service is to be inaugurated between Canada and Argentina. National market for live stock at Buenos Aires. Committee for the inspection of petroleum deposits in the Comodoro Rivadavia. Surveys by Division of Hydraulic Works at port of Comodoro Rivadavia. Arrangements made with Department of Immigration to have steamers touch at Bahia Blanca in order that immigrants may land. Opening of the Japanese Gardens of Buenos Aires. | Feb. 7 | R. M. Bartleman, consul general, Buenos Aires. |
| BRAZIL. | | |
| Report on beer | Jan. 6 | P. M. Griffith, consul, Pernambuco. |
| Ship repair yard for Rio de Janeiro | ...do... | J. J. Slechta, vice consul general, Rio de Janeiro. |

## REPORTS RECEIVED TO APRIL 1, 1911—Continued.

| Title. | Date. | Author. |
|---|---|---|
| BRAZIL—continued. | 1911. | |
| Market for automobiles | Jan. 6 | J. White, consul, Santos. |
| Production of fertilizers | Jan. 9 | Do. |
| Market for railway material | ...do | Do. |
| Brazilian railroads opened to traffic | Jan. 11 | J. J. Slechta, vice consul general, Rio de Janeiro. |
| Iron industry in Brazil | ...do | Do. |
| The Brazilian Exchange Bureau | Jan. 12 | Do. |
| Brazilian foreign trade—January to October, 1910 | ...do | Do. |
| Declared exports from Rio de Janeiro to the United States in 1911. | Jan. 15 | Do. |
| Municipal taxes in Rio de Janeiro | Jan. 21 | Do. |
| Workingmen's houses in Rio de Janeiro | Jan. 23 | Do. |
| Brazilian foreign trade in 1910 | Jan. 26 | Do. |
| Horseshoeing in foreign countries | Feb. 8 | G. C. Pickerell, consul, Para. |
| Catalogues | ...do | J. White, consul, Santos. |
| Changes in steamship service to Brazil | Feb. 14 | J. J. Slechta, vice consul general, Rio de Janeiro. |
| CHILE. | 1910. | |
| Market for motor cars | Dec. 26 | Rea Hanna, consul, Iquique. |
| | 1911. | |
| Automobiles | Jan. 7 | A. A. Winslow, consul, Valparaiso. |
| Opening for water-work supplies | Jan. 16 | Do. |
| Petroleum and natural gas in Chile | ...do | Do. |
| Conditions in Chile at beginning of 1911 | ...do | Do. |
| Saltpeter mines not subject to embargo | Feb. 1 | C. H. Baker, vice and deputy consul, Valparaiso. |
| Coal consumption in Chile | Feb. 3 | Do. |
| Conditions in Santiago, Chile | Feb. 4 | A. A. Winslow, consul, Valparaiso. |
| Complaint about defective American portable engines sold in Chile. | Feb. 6 | Do. |
| Extensive navy yards and harbor improvements to be made by Chilean Government. | ...do | Do. |
| Visit to nursery "Santa Ines" | ...do | Do. |
| Conditions at Valdivia since great fire | ...do | Do. |
| Barbed wire in Chile | ...do | Do. |
| Trade and Industrial Notes: Incorporation of stock companies. Number of immigrants to Chile, principally from Spain and Italy. Vineyards of Chile. Deaths in Santiago. Exports for the first ten months of 1910. Contracts for schoolhouses. Coal for use on the Government railroads. Price of nitrate. Chilean customs receipts. | ...do | Do. |
| Railroad from Lebu to Sauces | Feb. 7 | Do. |
| Appropriations made by Chilean Congress for 1911 | ...do | Do. |
| Coal imported during 1910 | ...do | Do. |
| Railroads under construction | Feb. 13 | Do. |
| Borax industry | ...do | Do. |
| Comparative statement of declared exports | Feb. 14 | Do. |
| Increase in passenger and freight rates on Chilean railways | ...do | Do. |
| Electric-lamp trade | Feb. 16 | Do. |
| Trade in ribbons | Feb. 18 | Do. |
| Cost of gasoline, electric light, and gas | ...do | Rea Hanna, consul, Iquique. |
| Fire-brick trade | Feb. 21 | A. A. Winslow, consul, Valparaiso. |
| COLOMBIA. | | |
| Supplementary report on prices of beer in Colombia | Jan. 28 | Chas. H. Small, vice and deputy consul general, Bogota. |
| COSTA RICA. | | |
| Sale of optical goods abroad | Feb. 5 | F. P. Scott, vice consul pro tem, San Jose. |
| CUBA. | | |
| Railway construction in Cuba | Feb. 10 | John B. Jackson, American minister, Havana. |
| Cuban National Exposition of Agriculture, Industry, Arts and Work of Women. | Feb. 11 | James L. Rodgers, consul general, Havana. |
| Awarding of contract for 4 gunboats | Feb. 16 | John B. Jackson, American minister, Havana. |
| DOMINICAN REPUBLIC. | | |
| Market for pharmaceutical supplies | Jan. 20 | P. E. Holland, consul, Puerto Plata. |
| Dairy farming in the Dominican Republic | Jan. 31 | Do. |
| Cost of traveling in the Dominican Republic | Feb. 10 | Do. |
| Report showing, respectively, the barometer, thermometer, and higrometer readings and rainfall in Puerto Plata. | Feb. 20 | Do. |
| Street building in Puerto Plata | Feb. 21 | Do. |
| Table of receipts and disbursements, showing resources of municipal revenue of Puerto Plata for the year 1910. | ...do | Do. |

## REPORTS RECEIVED TO APRIL 1, 1911—Continued.

| Title. | Date. | Author. |
|---|---|---|
| ECUADOR. | 1911. | |
| Automobiles in Ecuador | Jan. 2 | H. R. Dietrich, consul, Guayaquil. |
| Best selling goods in Ecuador | Jan. 6 | Do. |
| Climate of Guayaquil | Jan. 14 | Do. |
| Municipal improvements in Ecuador | Jan. 16 | Do. |
| Concession granted by Government of Ecuador to refine crude petroleum. | Jan. 20 | Do. |
| Concession granted by Government of Ecuador for the exclusive right to fish for mother-of-pearl in territorial seas and rivers of the Provinces of Guayas, Manabi, and Esmeraldas for six years. | ...do.... | Do. |
| Concession granted by Government for the exclusive right to manufacture iron and metal beds in the Province of Guayas for five years. | ...do.... | Do. |
| Why market for spool silk and silk thread was lost to American manufacturers. | Feb. 23 | Do. |
| GUATEMALA. | | |
| How to get "Huipil" | Jan. 5 | Geo. A. Bucklin, jr., consul general, Guatemala City. |
| Market for grinding mills | ...do.... | Do. |
| Market for cement | Jan. 6 | Do. |
| Sources of information on coffee | ...do.... | Do. |
| List of agents | ...do.... | Do. |
| Market for steam rollers | Jan. 9 | Do. |
| Market for machinery | Jan. 10 | Do. |
| Market for candle machinery | ...do.... | Do. |
| Opening for civil engineer | Jan. 12 | M. F. Friely, consul, Champeriso. |
| Market for refrigerating machinery | ...do.... | Geo. A. Bucklin, jr., consul general, Guatemala City. |
| Opening for a bank | ...do.... | Do. |
| Mining in Guatemala | ...do.... | Do. |
| Market for cement | Jan. 17 | Do. |
| Market for carpet sweepers | Jan. 20 | Do. |
| Market for rebuilt typewriters | ...do.... | Do. |
| Mail-order trade | Jan. 25 | Do. |
| Sheet-metal building material | Jan. 30 | Do. |
| Oil engines, pumps, grinding mills, etc | ...do.... | Do. |
| Plantation machinery | ...do.... | Do. |
| Filing and other cabinets | Jan. 31 | Do. |
| Mosaic and floor tile | Feb. 1 | Do. |
| Fireless cookers | Feb. 3 | Do. |
| Plows, plantation and sugar-mill machinery | Feb. 4 | Do. |
| Obstacles to American exports to Guatemala | ...do.... | Do. |
| Plantation machinery | ...do.... | Do. |
| Filters and stoneware | Feb. 8 | Geo. A. Bucklin, consul general, Guatemala City. |
| Disinfectants | ...do.... | Do. |
| Sheet-metal building material | Feb. 15 | Do. |
| Coin-operated machines | Feb. 17 | Do. |
| Pens, paper chips, and toothpicks | Feb. 21 | Do. |
| Metal doors | Feb. 24 | Do. |
| Bank notes, bonds, etc | Feb. 25 | Do. |
| Squids in oil | Feb. 28 | Do. |
| Firearms | Mar. 6 | Do. |
| Telephone and electric developments | Mar. 8 | Do. |
| HONDURAS. | | |
| Catalogue of the Agricultural School at Tegucigalpa | Jan. 19 | A. T. Haeberle, consul, Tegucigalpa. |
| MEXICO. | | |
| Railway positions open | Jan. 4 | Alexander V. Dye, consul, Nogales. |
| Supply of Guayule | Jan. 7 | T. W. Voetter, consul, Saltillo. |
| Market for cheese-cutting machines in Mexico | ...do.... | Do. |
| Market for musical instruments | ...do.... | Do. |
| Market for buoys and boats | Jan. 11 | L. W. Haskell, consul, Salina Cruz. |
| Market for pianos—plan for selling | Jan. 13 | Geo. B. Schmucker, consul, Ensenada. |
| Salt production | Jan. 16 | C. A. Miller, consul, Tampico. |
| Pianos | Jan. 17 | L. W. Haskell, consul, Salina Cruz. |
| Mexican colonization law | Jan. 18 | A. J. Lespinasse, consul, Frontera. |
| General data about Matamoros | ...do.... | J. H. Johnson, consul, Matamoros. |
| Publisher of directory | ...do.... | P. C. Hanna, consul general, Monterey. |

## REPORTS RECEIVED TO APRIL 1, 1911—Continued.

| Title. | Date. | Author. |
|---|---|---|
| MEXICO—continued. | | |
| | 1911. | |
| Comparative statement of merchandise declared for exportation to United States, calendar years 1909 and 1910. | Jan. 20 | Chauncey Canada, consular agent, Puerto Mexico. |
| Market for fireworks | Jan. 23 | Wm. Canada, consul, Veracruz. |
| Water-right concession in San Luis Potosi | Jan. 24 | Wilbert L. Bonney, consul, San Luis Potosi. |
| Market for bluing | ...do..... | A. V. Dye, consul, Nogales. |
| "Comiteca," name given to a spirituous liquor manufactured in Comitan. | Jan. 27 | A. W. Brickwood, jr., consul, Tapachula. |
| Guatemalan silver money in Chiapas | ...do..... | Do. |
| Population of the State of Chiapas | ...do..... | Do. |
| Pan American Railway notes: The increase in general business of the Pan American Railway for 1910 over the year 1909 ranges from 15 per cent to 75 per cent per month, as compared with the same periods of the year of 1909, both passenger and freight traffic having been much heavier and better paying. A number of steel bridges have been put in during 1910, and more will be placed during the present year. The whole line will be practically re-tied. During 1910 the Pan American handled 8,500 tons of coffee, which was shipped to Europe, United States, and Mexican points. Rubber industry is increasing. | (a) | Do. |
| Comparative statement of merchandise declared for exportation to the United States for the calendar years 1909 and 1910, at Salina Cruz. | Jan. 28 | L. W. Haskell, consul, Salina Cruz. |
| Cyanide treatment of ores at Parral, Chihuahua | ...do..... | C. M. Leonard, vice consul in charge, Chihuahua. |
| Annual report on commerce and industries of the southern district of Lower California for year 1910. | ...do..... | L. A. Sullivan, consul, La Paz. |
| Market for musical instruments | ...do..... | A. J. Lespinasse, consul, Frontera. |
| Market for toilet specialties | ...do..... | Do. |
| Market for fireworks | ...do..... | S. E. Magill, consul, Guadalajara. |
| Market for electric appliances | ...do..... | Do. |
| Market for vehicles | ...do..... | Wm. Canada, consul, Veracruz. |
| Résumé of imports through the Soconusco custom house | Jan. 31 | A. W. Brickwood, jr., consul, Tapachula. |
| Yucatan mules | ...do..... | G. B. McGoogan, consul, Progreso. |
| Market for automobiles | ...do..... | A. B. Garrett, consul, Nuevo Laredo. |
| Mexican exports through Tampico | Feb. 1 | P. C. Hanna, consul general, Monterey. |
| Minerals in Yucatan | ...do..... | G. B. McGoogan, consul, Progreso. |
| Market for metal ceilings | ...do..... | M. Letcher, consul, Acapulco. |
| Market for marine boilers | ...do..... | Do. |
| Chiapas mineral resources | ...do..... | A. W. Brickwood, jr., consul, Tapachula. |
| Market for automobiles | Feb. 3 | E. M. Lawton, consul, Oaxaca. |
| New steamship line to Mexico | ...do..... | Geo. B. Schmucker, consul, Ensenada. |
| Importation of coal | Feb. 4 | C. A. Miller, consular agent, Tampico. |
| European fruit trees for Mexico | ...do..... | Wm. Canada, consul, Veracruz. |
| Telephone directory of Durango | Feb. 6 | Charles M. Freeman, consul, Durango. |
| Market for roofing | ...do..... | A. V. Dye, consul, Nogales. |
| Imports of gloves—tariff | Feb. 7 | Arnold Shanklin, consul general, Mexico. |
| Increase in exports from the United States to Mexico | Feb. 8 | A. B. Garrett, consul, Nuevo Laredo. |
| Monthly bulletin of Consular Trade Reports to be published by the Mexican Government. | ...do..... | Do. |
| Extension of trade in northern Mexico | ...do..... | Charles M. Freeman, consul, Durango. |
| Fireworks | ...do..... | A. J. Lespinasse, consul Frontera. |
| Cheese cutters | ...do..... | Do. |
| Candelilla shrub in San Luis Potosi | Feb. 9 | W. L. Bonney, consul, San Luis Potosi. |
| Quicksilver mines in San Luis Potosi | ...do..... | Do. |
| Salina Cruz Shipping Notes: Salina Cruz not made a port of call by certain steamship lines. English steamer making three trips a month from Salina Cruz to Acajutla, Salvador, and a Japanese line represents the entire service for freight and passengers south of this port. | ...do..... | L. W. Haskell, consul, Salina Cruz. |

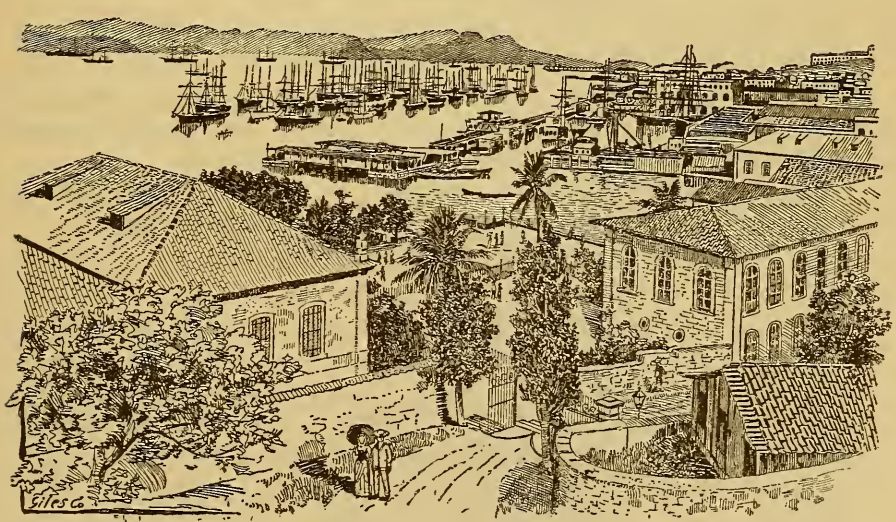
a Undated.

## REPORTS RECEIVED TO APRIL 1, 1911—Continued.

| Title. | Date. | Author. |
|---|---|---|
| MEXICO—continued. | | |
| Coaling station of Japanese steamship line | 1911. Feb. 10 | R. M. Stadden, vice consul, Manzanillo. |
| Industrial and Trade Notes: Preparations being made looking toward an early start in the construction of the projected railroad from Camacho, Zacatecas, eastward to Mazapil. At the present time a tram line of 24-inch gauge is being constructed from La Paz station on the Coahuila and Pacific division of the National Lines, about 11 miles, to a tract of timber from which ties to be used by the new railroad will be obtained. There was sent by dispatch No. 129 of Jan. 27, a small sack made from Lechuguilla fiber, containing some date seeds. Because of short crop of almonds in Spain last year, opportunities of introducing almonds from California are better than formerly. Most of the vinegar used is made from wine and comes from France. American layer raisins are being sold this year by the same stores which formerly sold Spanish ones. | ...do.... | T. W. Voetter, consul, Saltillo. |
| Market for phone appliances | Feb. 11 | L. W. Haskell, consul, Salina Cruz. |
| New hotel needed | Feb. 14 | G. B. Schmucker, consul, Ensenada. |
| Rubber and henequen lands | Feb. 15 | G. B. McGoogan, consul, Progreso. |
| Market for marine paints | Feb. 17 | Do. |
| Packing of American goods for export | Feb. 18 | Wm. Canada, consul, Veracruz. |
| Comparative statement showing total exports from port of Mazatlan, Sinaloa, to all countries during calendar years 1908, 1909, 1910. | ...do.... | Wm. Alger, consul, Mazatlan. |
| Census of the State of Sinaloa | Feb. 22 | Do. |
| Exports from Ciudad Porfirio Diaz District to United States for year ending Dec. 31 1910. | Feb. 23 | L. T. Ellsworth, consul, Ciudad Porfirio Diaz. |
| Motor boats | ...do.... | A. V. Dye, consul, Nogales. |
| Duty on scented soaps | ...do.... | Do. |
| Development of Western Mexico | Feb. 24 | S. E. Magill, consul, Guadalajara. |
| Pianos. Where to get phone directory | ...do.... | P. C. Hanna, consul general, Monterey. |
| Sale of optical goods abroad | Feb. 25 | Arnold Shanklin, consul general, Mexico City. |
| Paraffin wax—no candle manufacturers in district | Feb. 27 | L. W. Haskell, consul, Salina Cruz. |
| Blank books and stationary | Feb. 28 | A. J. Lespinasse, consul, Frontera. |
| Sheet-metal building material | ...do.... | Do. |
| Mail-order trade | ...do.... | Do. |
| Comparative statement, with table, of the value of merchandise declared for exportation to the United States, from Aguascalientes and Zacatecas, in the years 1909 and 1910. | Mar. 1 | A. Smith, consul, Aguascalientes. |
| Difficulties in use of loose-leaf devices in Mexico | Mar. 6 | A. V. Dye, consul, Nogales. |
| Motor boats | ...do.... | Do. |
| Gowns, cotton, silk, and other dry goods | Mar. 10 | S. E. Magill, consul, Guadalajara. |
| Sulphur deposits of Lower California | Mar. 11 | Geo. B. Schmucker, consul Ensenada. |
| Placer sampling oil and artesian well-drilling machinery | ...do.... | Wilber L. Bonney, consul, San Luis Potosi. |
| How to sell goods in Mexico—hints regarding catalogues | Mar. 16 | P. C. Hanna, consul general, Monterey. |
| NICARAGUA. | | |
| Route to western Nicaragua | Jan. 26 | Jose de Olivares, consul, Managua. |
| Strike in Corinto | Feb. 13 | James W. Johnson, consul, Corinto. |
| PANAMA. | | |
| Raising import duties | Jan. 21 | A. G. Snyder, consul general, Panama. |
| Decree regarding tariff on imports | Jan. 24 | C. Campbell, jr., secretary of legation, Panama. |
| Raising import duties | Jan. 27 | A. G. Snyder, consul general, Panama. |
| Foreigners securing land (law of 1907) | Feb. 8 | C. Campbell. jr., secretary of legation, Panama. |
| Trade Opportunities: Only one electric-light company in Colon. | Mar. 6 | J. C. Kellogg, consul, Colon. |
| PARAGUAY. | | |
| Timber in Paraguay | 1910. Dec. 23 | C. Ferris, consul, Asuncion. |
| Methods of introducing goods | ...do.... | Do. |
| Lighting systems and electric power. Building contractors | 1911. Jan. 13 | Do. |
| Brazilian railroad interests in Paraguay | Jan. 30 | Do. |
| Report on the commerce and industries of Paraguay for 1910 | Feb. 4 | Do. |

## REPORTS RECEIVED TO APRIL 1, 1911—Continued.

| Title. | Date. | Author. |
|---|---|---|
| PARAGUAY—continued. | | |
| | 1911. | |
| Asuncion as a future coal depot | Feb. 6 | C. Ferris, Consul, Asuncion. |
| Railway supplies | Feb. 11 | Do. |
| PERU. | | |
| Prices of beer in Peru | Jan. 28 | W. H. Robertson, consul general, Callao. |
| SALVADOR. | | |
| Customs tariff system of the Republic of Salvador | Jan. 17 | T. E. Dabney, consul general, San Salvador. |
| Memoria de Hacienda y Crédito Público | Feb. 6 | Do. |
| Mining industry of Salvador | Feb. 12 | Do. |
| URUGUAY. | | |
| | 1910. | |
| Report on sale of optical goods in Uruguay | Dec. 28 | F. Landon Goding, vice consul, Montevideo. |
| | 1911. | |
| Foreign commerce of Uruguay | Jan. 13 | Do. |
| Montevideo municipal statistics, 1909 | Jan. 16 | Do. |
| New bridges and drainage works in Uruguay | Jan. 17 | Do. |
| Customs revenue of Uruguay | Jan. 23 | Do. |
| Awarding of asphalt-paving contracts in Montevideo | Jan. 31 | Do. |
| Bill for more asphalt paving in Montevideo | Feb. 8 | Do. |
| VENEZUELA. | | |
| Change in Venezuelan tariff | Jan. 14 | Isaac A. Manning, consul, La Guaira. |
| Change of sailing days from Saturday to Wednesday by certain steamship line. | Jan. 20 | Sheldon Whitehouse, chargé d'Affaires, Caracas. |
| Fish industry of Lake Maracaibo | Jan. 27 | R. J. Totten, consul, Maracaibo. |
| Classification of various articles for customs purposes | Feb. 10 | A. Leefmans, vice consul, La Guaira. |
| Law for paying debts | Feb. 17 | Herbert R. Wright, consul, Puerto Cabello. |



# ARGENTINE REPUBLIC

## COPYRIGHT REGULATION.

The United States Consul General at Buenos Aires, R. M. BARTLEMAN, reports that on February 4, 1911, a decree affecting article 7 of the copyright law of September 10, 1910, was issued by the Ministry of Education. The decree directs that there be created in the national library a section known as the "Legal Deposit," in which will be registered the title of every work deposited, the name of its author, and the date of registration. A receipt, without charge, will be given to the depositor, and a list of the works deposited will be published from time to time. In the case of dramatic or musical works not printed the copy of the manuscript, signed by the author, will be sufficient for purpose of registration.

## ARGENTINE PROPAGANDA.

The Minister of Foreign Affairs has issued a decree directing Argentine consular officers to give, at least twice a year, in their respective districts, lectures on the resources and general progress of Argentina and the advantages offered to capitalists, as well as to immigrants and colonists.

## POPULATION OF BUENOS AIRES.

The United States Consul General at Buenos Aires reports that the population of that city on January 31, 1911, was 1,319,747.

## FOREIGN COMMERCE IN 1910.

In the last issue of the BULLETIN there were published the estimated figures of the foreign trade of Argentina for the year 1910. The official statistics are now at hand and reveal totals which exceed by many millions the estimated amounts, marking the year just passed a banner one in the commercial history of the Republic.

The total foreign commerce amounted to $724,396,711, as against $700,106,623 for the year 1909—an increase of $24,290,088.

The exports and imports, by countries, were distributed as follows:

| Countries. | Exports (Argentine gold). | Imports (Argentine gold). | Countries. | Exports (Argentine gold). | Imports (Argentine gold). |
|---|---|---|---|---|---|
| Great Britain | $80,793,485 | $109,377,394 | Austria-Hungary | $1,867,703 | $3,466,115 |
| Germany | 45,054,817 | 61,128,888 | Uruguay | 1,533,957 | 2,262,394 |
| France | 37,761,712 | 33,650,640 | Bolivia | 578,478 | 138,335 |
| Belgium | 30,480,743 | 19,598,982 | Africa | 337,254 | 64,396 |
| United States | 25,323,561 | 48,418,892 | Paraguay | 143,250 | 1,554,777 |
| Brazil | 17,542,026 | 9,103,594 | Other countries | 7,073,821 | 17,320,486 |
| Italy | 10,474,862 | 32,776,115 | Other countries (orders) | 103,783,235 | ..... |
| Netherlands | 4,300,508 | 2,517,189 | | | |
| Spain | 2,870,077 | 10,910,910 | Total | 372,626,055 | 351,770,656 |
| Chile | 2,706,566 | 481,549 | | | |

The imports in 1910 by classes of products were as follows:

| | Imports (Argentine gold). | | Imports (Argentine gold). |
|---|---|---|---|
| Textiles and manufactures thereof | $68,365,167 | Paper and manufactures thereof | $8,307,701 |
| Iron and manufactures thereof | 43,119,488 | Tobacco and tobacco products | 6,081,719 |
| Wagons, vehicles, etc | 35,095,183 | Electric apparatus and supplies | 5,741,530 |
| Stone, earthen and glass ware | 30,925,510 | Spices, etc | 5,606,643 |
| Building material | 29,237,334 | Animal food substances | 5,046,871 |
| Agricultural products | 18,921,823 | Legumes and cereals | 4,819,925 |
| Beverages | 14,951,151 | Leather and leather products | 3,075,615 |
| Fixed oils, mineral and medicinal waters, etc | 13,892,439 | Paints and dyes | 2,305,042 |
| Other metals and their manufactures | 12,870,455 | Vegetable food substances | 1,914,448 |
| Chemical and pharmaceutical products | 12,289,907 | Flour, starch, and like products | 1,149,681 |
| Lumber and manufactures thereof | 8,670,726 | Live stock | 964,442 |
| Cacao, coffee, tea, yerba maté, etc | 8,603,691 | Miscellaneous articles | 9,814,165 |
| | | Total | 351,770,656 |

The accompanying table of exports and imports of Argentina, for the decade 1901–1910, is of particular interest as it shows a steady, unbroken development in the volume of the exchange trade of the country:

| Years. | Exports (Argentine gold).[a] | Imports (Argentine gold).[a] | Total (Argentine gold).[a] |
|---|---|---|---|
| 1901 | $167,716,102 | $113,959,749 | $281,675,851 |
| 1902 | 179,486,727 | 103,039,256 | 282,525,983 |
| 1903 | 220,984,524 | 131,206,600 | 352,191,124 |
| 1904 | 264,157,525 | 187,305,969 | 451,463,494 |
| 1905 | 322,843,841 | 205,154,420 | 527,998,261 |
| 1906 | 292,253,829 | 269,970,521 | 562,224,350 |
| 1907 | 296,204,369 | 285,860,683 | 582,065,052 |
| 1908 | 366,005,341 | 272,972,730 | 638,978,080 |
| 1909 | 397,350,528 | 302,756,095 | 700,106,623 |
| 1910 | 372,626,055 | 351,770,656 | 724,396,711 |

[a] All values are expressed in the Argentine gold peso, equivalent to $0.965 United States gold.

## INDUSTRIAL CENSUS IN 1910.

The Bureau of Commerce and Industry of Argentina has recently issued the industrial census of the nation for 1910, showing that there are in operation in Argentina 31,988 industrial establishments, 5,750 of which belong to citizens of the Commonwealth and the remainder to foreigners. The capital represented by these industrial establishments throughout the entire Republic amounts to $727,591,135, while the annual value of their combined production is $1,227,549,196. The raw material used by these industries in the processes of manufacture during 1910 represented a total value for domestic materials of $532,560,339 and of foreign raw material $179,607,454. The persons employed in these industries in 1910 numbered 329,490.

These statistics further show that there are 10,427 manufacturing establishments in the Federal District, 1,347 of which belong to Argentinians and the remainder to foreigners. The aggregate capital of the industrial establishments of the Federal District is $266,460,218, and their sales in 1910 totaled $534,739,589. The

value of domestic raw material utilized in the Federal District by the establishments referred to was $168,845,864, and that of foreign raw material $117,860,717, and the number of people employed in them aggregated 118,435.

### SOAP FACTORIES IN ARGENTINA.

According to a consular report from Buenos Aires, there are 200 soap factories in operation in Argentina, with a capital of $1,096,070 United States currency, and selling annually products valued at $3,014,304. One hundred and twenty-six of these factories are situated in the city and the Province of Buenos Aires, while the remainder are distributed chiefly among the Provinces of the north.

### COAL AND OIL IMPORTS.

The imports of coal into Argentina during 1910 amounted to 3,326,355 tons, valued at $22,469,531 United States currency. Compared with the imports of the preceding year, this represents an increase of 1,138,725 tons. In 1910 there were imported into the country 71,305,506 liters of kerosene valued at $2,064,295, and 39,478 tons of impure naphtha valued at $3,809,683.

### REAL ESTATE TRANSFERS IN 1910.

Realty transfers in Argentina during 1910 aggregated 54,082 transactions, representing a value of 902,853,940.61 pesos ($397,255,734). Of this amount 50,437 transactions were negotiated in Buenos Aires at a valuation of 811,672,304.66 pesos ($357,135,814), and the remaining transfers were consummated in the Territories of the Republic. During 1909 the total valuation of transfers in the Republic was 606,621,384.80 pesos ($266,913,409), covering 41,054 transactions. Of these totals 38,622 transfers, valued at 528,768,397.84 pesos ($232,658,094), were made at Buenos Aires.

### EXPORTS OF CEREALS IN 1910.

In 1910 the exports of cereals from Argentina consisted of 1,900,000 tons of wheat, 6,600,000 tons of corn, 650,000 tons of linseed, and 370,000 tons of oats, or a total of 9,520,000 tons. The estimated value of these shipments per ton is as follows: Wheat, 60 pesos ($26.40); corn, 45 pesos ($19.80); linseed, 145 pesos ($63.80), and oats, 45 pesos ($19.80).

### COMPETITIVE FLAXSEED EXHIBITION.

The Bureau of Agriculture has been authorized by the Argentine Government to organize a competitive flaxseed exhibition. The cultivation of flax is one of the leading agricultural industries of the Republic, the exports of linseed alone in 1910 totaling 654,000 tons.

### AGRICULTURAL STATIONS IN CENTRAL PAMPA.

With the object of improving agricultural and stock-raising conditions in the Pampa Central Territory of Argentina, the Government proposes to establish agricultural stations throughout the entire district, commencing with Villa Iris, Bernasconi, Epuvel, Quehuc, Macachin, and Guatrache.

### PROPOSED PISCICULTURAL STATION.

The Bureau of Fisheries, Department of Agriculture, has recommended the establishment of a central piscicultural station in the Province of Buenos Aires. It is proposed to cultivate and develop the propagation of trout and other desirable fresh-water fish in the streams of the Republic.

### NEW AMUSEMENT RESORT.

The Japanese Gardens of Buenos Aires, which have been in process of construction for some time, were opened last February. These gardens are situated on the bank of the River Plate and promise to become one of the most popular outdoor amusement resorts of the city.

### MISCELLANEOUS CONSULAR NOTES.

Work will soon be commenced on the new freezing plant at the port of La Plata in accordance with the concession of the Argentine Government to a United States concern.

A national live-stock market has been proposed by the Minister of Agriculture. This market would be in the vicinity of Buenos Aires and have a capacity for receiving up to 30,000 animals daily, where they could be kept in alfalfa fields, with water troughs and bathing places, until sold. The owners of the live stock would be charged a small sum per day for the keep of the animals.

### OIL FIELDS OF COMODORO RIVADAVIA.

An interesting fact in connection with the petroleum deposits of Comodoro Rivadavia is that their discovery several years ago was a happy accident. A well was being drilled in search of water, under the direction of the Department of Mines, but instead of water oil was found. Notwithstanding the fact that neither the quality of oil discovered nor the extent of the deposits was known at that time, nevertheless great excitement prevailed in the district and attempts to claim adjacent lands became numerous. The Government, however, in order to protect and conserve to the State these valuable oil deposits, exercising her right of eminent domain, acquired 5,000 hectares of the land contiguous to the oil wells.

Other borings were then made and the deposits were found to be extensive and abundant. The oil extracted, even in its natural state,

proved to be an excellent fuel with 50 per cent more caloric power than the best imported coal. It was at once substituted for coal on the engines running from Port San Antonio to Buenos Aires Lake, and was found to be most satisfactory under all conditions.

Petroleum deposits also exist at San Rafael and Cacheuta, Province of Mendoza, as well as in the Provinces of Jujuy and Salta; and a substance supposed to be petrified petroleum has been found about 40 miles south of Lake Argentina. With the development of her coal and oil fields, and the commercial utilization of these in connection with her other natural resources, the Argentine Republic is destined to enter upon a still greater period of prosperity and progress than ever before.

### CORDOBA SALT DEPOSITS.

A fact not generally known is the existence in the Province of Cordoba of extensive salt deposits. Experts who have investigated and studied the products of these mines proclaim them to be superior in many respects to the imported grades of salt. Up to the present period there has been no systematic exploitation of these deposits, but the press of Cordoba has recently agitated this question, and is now urging a scientific development of this mineral wealth. Properly exploited, the Province of Cordoba will find in these deposits a substantial source of revenue besides affording permanent and profitable employment to a large number of its population.

### ARGENTINA AT THE TURIN EXPOSITION.

One of the pavilions which is bound to attract a large number of visitors at the Turin Exposition, April 30–October 31, 1911, is that of Argentina. The Government has provided a handsome edifice for this purpose, and in this building there will be offered a most interesting and comprehensive display of the agricultural, mineral, and industrial wealth of the nation. Among the special features which Argentina will present is an exhibit of the products of the country, prepared by the Bureau of Animal Industry of the Department of Agriculture; another notable display will consist of a complete set of samples of the oil extracted from the newly exploited oil fields of Comodoro Rivadavia, in the southern part of the Republic. The Industrial School at Buenos Aires proposes to send a motor and several models made by the pupils of that institution, while the National Board of Education will exhibit a large collection from its museum, including relief maps of irrigation schemes, port works, and other public improvements. During the progress of the exposition numerous illustrated lectures on the agricultural, stock raising, and general industries of the Republic will be given; it is also proposed to set forth the resources of the country, the opportunities offered to immigrants and capitalists, while considerable literature bearing on these subjects will be freely distributed.

### SCIENTIFIC EXPEDITION TO PATAGONIA.

A scientific commission consisting of Prof. LEWIS and two students is to be sent by Amherst College, of Amherst, Mass., during July, 1911, to collect fossils and make a biological study of Patagonia. Investigations will be confined principally to the territory between the Santa Cruz and Deseado Rivers.

### SCIENTIFIC EXPLORATION OF THE ANDES.

The Department of Agriculture has arranged with Dr. FRANZ KÜHN, a German scientist, to make a journey into the Argentinian cordillera of the Andes for the purpose of studying the unexplored regions of the Andean range. The investigations will be confined chiefly to the magnetic declination, geology, morphology, orography, hydrography, and meteorology of the unexplored districts penetrated. A collection of minerals will be made, and the possibilities for exploiting the regions visited will also be studied.

### DONATION OF LAND FOR AGRICULTURAL SCHOOL.

Mr. FERNANDO BERCELÓ has donated for a period of 10 years 250 hectares of land in Bahia Blanca, Argentina, for the establishment of an industrial agricultural school.

### ELECTRIC LIGHT AND POWER PLANT AT SORRENTO.

An electric light and power plant at Sorrento, near the thriving city of Rosario, Province of Santa Fe, Argentina, is now in course of erection. The installation is to be provided with turbines capable of generating 30,000 horsepower, and will probably be ready for operation early in 1912. The Rosario electric tramways will be furnished with power from this plant, and the old installation at Avenida Pelligrini, in the city of Rosario, will be closed. Cables of a length sufficient to extend over 100 kilometers of streets will begin to arrive at Rosario in May next, and will be used at different points in that city for the transmission of current. The complete installation represents an expenditure of £200,000, and when completed and put into operation will be one of the largest and best-equipped electric light and power plants in the Republic.

### RETAIL SHOPS IN ROSARIO.

The census of commerce and industry shows the following results: 2,417 stores supply the city with food; 426 stores deal in furniture and building supplies; 1,119 establishments handle clothing and toilet articles; 486 ship agencies and commission houses; 292 stores deal in metals; 348 sell personal ornaments and athletic goods; 86 handle writing materials; there are 120 sanitary shops; 100 stores selling cotton goods, and 214 general merchandise stores, making the total number of commercial houses in Rosario 5,068.

### ROSARIO AND CONSULAR DISTRICT NOTES.

HENRY P. COFFIN, the United States Consul at Rosario, reports that the municipal authorities have recently issued the results of the third census taken in April, 1910. An interesting fact noted in this report is that the site to-day occupied by the city was first occupied in 1689. In 1743 a census was taken for the whole Province, which assigned to Rosario 1,240 inhabitants, not counting the Indians. The census of April, 1910, gives Rosario a population of 192,278 inhabitants.

A steel shot tower, 200 feet high, has just been erected in Rosario. The work was done by the Cooper Construction Co., a United States firm.

Rosario is to have a first-class casino. Ground has been purchased for the site and the building will be completed within a year at a cost of several hundred thousand dollars.

The new port works of Santa Fe have been opened and an added stimulus has been given to the business of this port.

### AN AMERICAN CONTRACT.

The Government has accepted the tender of the Harlan & Hollingsworth Co., Wilmington, Del., for the construction of 6 first-class, 6 second-class, and 6 mixed passenger cars, 4 brake vans, and spares, for use on the railway line from San Antonio to Mahuel Huapi.

### NEW ISSUE OF RAILWAY BONDS.

The Central Railway of Cordoba, Argentina, has issued debenture bonds to the value of £500,000, and the Northwestern Argentine Railway has also authorized a bond issue to the nominal value of £1,000,000. These bonds bear 4½ per cent interest per annum, and the proceeds of their sale will be used in the extension of the railway lines as well as in new construction work.

### LA PLATA TO BUENOS AIRES ELECTRIC RAILWAY.

Construction work on the electric railway from La Plata to Buenos Aires, the concession for which was granted to Otto Franke & Co., on April 20, 1910, is to begin at once.

### MISCELLANEOUS RAILWAY NOTES.

On March 20, the first section of the port constructed by the Rosario-Belgrano Railway Co. at Puerto Militar was opened to traffic.

The Minister of Public Works has approved the plans and estimates of the first section of the State railway between Diamante and Curuzu-Cuatia. The opening of the railway from Mazan to Tinogasta (Andalgala) has also been authorized.

### RAILWAY EXTENSIONS.

The Argentine Government, through its Minister of Public Works, has authorized the following lines to be opened to public service:

BUENOS AIRES TO PACIFIC RAILWAY.

Branches from Ramales de Maza to Tres Lomas, and westward for 34 kilometers; Mendoza to La Cumbre, in the part between Las Cuevas and the Tunnel; Rawson to Arribeños, 62.15 kilometers, from July 1, 1911.

CENTRAL ARGENTINE RAILWAY.

From Las Rosas to Monte Grande, 31.4 kilometers; Cañada de Gomez southwestward, 30 kilometers; Carmen northwestwardly, 29.2 kilometers.

SOUTHERN RAILWAY.

From Alvear to Olavarria, 103.4 kilometers, and branch from same between kilometer 5, the south shore of the Riachuelo and the central produce market; from Mar del Plata to the Atlantic coast, 3.1 kilometers, and Florencio Varela to Ezpeletea, 6.8 kilometers.

On the 31st of July next, from Pringles to Corhue, 147.9 kilometers; Cooper to Cristiano Muerto, 72 kilometers; from the 20th of September next, Alvear to Pigue, 110 kilometers, and between Alvear and Recargo, 68.6 kilometers; from 31st of December next; between Constitucion and kilometer 5, and on the 30th of April, 1912, the Mar del Plata station.

For immediate service, Buenos Aires to Rosario, 376.7 kilometers; from Salliquelo, 135.3 kilometers; to Asturias of the line to La Plata, 90.6 kilometers; branch to Ludeña, 14.2 kilometers; branch to Mataderos, 21.2 kilometers; branch from Pergamino to Vedia, 120 kilometers.

CENTRAL CORDOBA.

From July 31 next, the branch to Rio Ceballos.

NORTHERN ARGENTINE RAILWAY.

From Santo Tome to Posadas, 90.5 kilometers.

## BOLIVIA

### AUTHORIZATION OF LOAN FOR PUBLIC IMPROVEMENTS.

The Federal Congress has authorized the President of Bolivia to negotiate a domestic loan of 1,500,000 bolivianos ($750,000) at the rate of 7 per cent interest annually and 1 per cent sinking fund, in order to obtain money for the sewering of La Paz and the procuring of a water supply for the towns of Oruro, Tarija, Cochabamba, and Santa Cruz.

## REPAIR OF JAILS AND COURTHOUSES.

The Congress of Bolivia has authorized the President of the Republic to borrow 100,000 bolivianos ($40,000) for use in the repair of jails and courthouses, and in providing new furniture for the courts of the Republic.

## VALUE OF STAMPED PAPER INCREASED.

A Federal law effective March 1, 1911, doubles the value of all stamped paper excepting that used for university and professional degrees. The value of stamped paper used on legal documents is increased 30 per cent over the year 1910.

## EXPORTS FROM NEW YORK TO BOLIVIA, FEBRUARY TO MARCH, 1911.

Through the courtesy of the Bolivian Minister at Washington, Señor DON IGNACIO CALDERON, the BULLETIN is in receipt of the following table of exports from New York to Bolivia for the months of February and March, 1911:

FEBRUARY.

| Articles exported. | Number of packages, bundles, etc. | Weight in kilograms. | Value of merchandise. |
|---|---|---|---|
| Cotton goods | 1,381 | 63,923 | $31,645.38 |
| Machinery | 244 | 33,365 | 8,482.32 |
| Foodstuffs | 255 | 12,679 | 2,476.96 |
| Hardware | 103 | 8,579 | 2,386.46 |
| Kerosene | 2,000 | 57,000 | 1,562.00 |
| Railroad supplies | 763 | 28,430 | 1,233.00 |
| Miscellaneous | 1,482 | 70,600 | 24,188.41 |
| Total | 6,228 | 274,576 | 71,974.53 |

MARCH.

| | | | |
|---|---|---|---|
| Cotton goods | 1,983 | 92,827 | $45,502.23 |
| Flour | 4,800 | 219,300 | 12,232.00 |
| Railroad supplies | 34 | 62,136 | 11,283.00 |
| Machinery | 476 | 19,424 | 7,386.92 |
| Kerosene | 6,850 | 226,450 | 6,178.00 |
| Hardware | 631 | 36,849 | 6,054.50 |
| Foodstuffs | 409 | 17,353 | 2,840.00 |
| Powder | 2,400 | 24,912 | 2,520.00 |
| Licorice | 14 | 1,055 | 243.00 |
| Miscellaneous | 1,429 | 70,226 | 24,700.31 |
| Total | 19,026 | 770,532 | 118,939.96 |

## SHOE FACTORY AT ORURO.

A new shoe factory, equipped with adequate machinery for the manufacture of an excellent quality of footwear, has been established at Oruro, Bolivia. Much of the leather used in the establishment will be supplied from domestic hides, some of which are high grade and especially noted for their softness, durability, and finish.

## COLLEGE FOR GIRLS IN COCHABAMBA.

The Commercial College for Girls in Cochabamba, Bolivia, had an enrollment at the beginning of the present year of about 300 pupils.

It was unable to accommodate all applicants because of inadequate accommodations and equipment. A small amount of money is available for the maintenance of the school, and the friends of the college are making an effort to secure from the Bolivian Congress an appropriation for the purchase of a new building, or the enlargement of the old one, to such an extent as to meet the growing needs of this important and flourishing educational institution.

### GERMAN MILITARY INSTRUCTORS.

The Government of Bolivia has engaged three German military officers to teach in the Bolivian Army.

### MINERALOGICAL MUSEUM AT LA PAZ.

The Minister of Industry of the Federal Government has issued a circular to the prefects of the departments requesting that they forward to the Department of Industry samples of ores, together with other data, on the production of mines for the purpose of establishing a mineralogical museum at La Paz.

### IRRIGATION FOR CONCEPCION.

The Budget for 1911 contains an appropriation for tapping Camacho River at Saladillo and extending an irrigation ditch to the city of Concepcion, capital of the Province of Aviles. This will supply water for irrigation purposes to a large section of surrounding country and should be of great value in developing the soil. The work is to be carried out under the direction of the Chief Executive.

### HIGHWAY FROM BANDERANI TO HUAILLAS.

When the present repairs and improvements on the highway from Banderani to Huaillas are completed, there will be placed into easy communication two important points adjacent to the active trading centers of Oruro.

### BOND ISSUE FOR WIRELESS STATIONS.

The Federal Congress has authorized the President of Bolivia to issue State bonds to the amount of 600,000 bolivianos ($240,000), the proceeds of which shall be used in establishing wireless telegraph stations at La Paz, Riberaalta, or Villa Bella, Cobija, Trinidad, Santa Cruz, Puerto Suarez, and Gran Chaco. The bonds are to bear an annual rate of interest not to exceed 8 per cent, and provision is to be made for a 3 per cent accumulative sinking fund. The sum of 66,000 bolivianos ($26,400) is to be appropriated annually by the Federal Government for the payment of interest and sinking fund until the bonds are redeemed. The Federal revenues are pledged to the redemption of the loan.

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### ELECTRIC LIGHT PLANT AT POOPO.

An electric light plant has been installed and opened to public service in the progressive town of Poopo, Department of Oruro. The town of Poopo is situated near the beautiful Lake Poopo in one of the most picturesque and important agricultural sections of Bolivia.

### ELECTRIC LIGHT SERVICE AT UNCIA.

The town of Uncia, situated in the Province of Bustillo, Bolivia, has recently been supplied with an electric light service by the Salvadora Electric Light Co. at Miraflores. A motor powerful enough to operate two large dynamos is used for generating the electricity.

### TELEGRAPH LINE FROM UYUNI TO TUPIZA.

The bid of CARLOS MAYER for the construction of a telegraph line from Uyuni to Tupiza has been accepted by the Federal Government.

### TELEGRAPHIC SERVICE BETWEEN CLIZA AND VILLA ANZALDO.

The President of the Republic has ordered the extension of the Federal telegraph line from Cliza to Villa Anzaldo, in the Province of Tarata. Funds defraying the expenses of construction are provided for in the budget of 1911.

### INTEREST GUARANTY ON ELECTRIC RAILWAY.

An Executive decree of January 24, 1911, guarantees 6 per cent interest annually on the capital invested in the construction of an electric tramway from San Jorge to Araca, via Obrajes and Calcoto. The President of Bolivia will accept bids for the construction of this line, selecting from those submitted the one most favorable to the interests of the nation.

### MULATOS TO POTOSI RAILWAY.

Eighty kilometers of the River Mulatos to Potosi Railway were opened to public service on the 1st of March of the present year.

### NEW RAILWAY FROM VIACHA TO LA PAZ.

A proposition for the construction of a 1-meter gauge railway from Viacha to La Paz, without a State guaranty of any kind, has been made by the Antofagasta Railway Co. to the Bolivian Government and accepted by the Federal Congress and approved by the President of the Republic. The term of the concession is ninety-nine years, after which period the railway, together with its appurtenances, will become the property of the State.

The Government will enjoy a reduction of 50 per cent on the freight, passenger, and telegraph rates of the railway company. The

company, on the other hand, may import free of duty, for a period of thirty years, the material and equipment necessary for the construction, maintenance, and development of the railway, and is likewise exempt during this period from Federal, State, and municipal taxes. The company is also granted the right to run its freight and passenger cars over the line of the Viacha to La Paz Railway, now in operation, and at present owned by the Bolivia Railway Co. (Ltd.).

### POTOSI TO SUCRE RAILWAY.

Mr. Jacobo Backu, representative of the Bolivia Railway Co., has, through the Department of Promotion (Fomento), made a proposal for the final survey of the railway from Potosi to Sucre. Under the arrangement referred to, the Bolivia Railway Co. agrees to make a definite survey and to submit it to the Government for approval within one year from the date of its acceptance of this proposal. For these plans the Government agrees to pay the railway company £15,000, which is the estimated minimum cost of the survey, and, all things being equal, to give the Bolivian Railway Co. the preference in the construction of the said railway.

The law of November 27, 1906, provides that the revenue from the sale of the Guaqui to La Paz Railway shall be applied to the construction of the Potosi to Sucre Railway. The commercial interests of Bolivia, and especially of the city of La Paz, are urging the construction of this railway, which will penetrate one of the richest, most populous, and progressive sections of the Republic. It will open up to development and exploitation an immense territory of the country which has hitherto been both expensive to reach and difficult of access. It is believed that few railway projects in Bolivia offer greater prospects of success or a richer return on the capital invested than does the proposed line from Potosi to Sucre.

## BRAZIL

### INDUSTRIAL ESTABLISHMENTS.

According to figures appearing in "O Paiz" of Rio de Janeiro, there are now 3,258 manufacturing establishments in Brazil, having a total capitalization of 665,676,000 milreis,[a] and an annual output valued at 741,536,000 milreis. The total number of operatives employed is estimated at 151,841.

[a] The milreis paper has an approximate value of 33⅓ cents United States gold.

Of these, the cotton mills represent the largest investment, or 40.32 per cent of the total capital invested in the manufacturing industry. There are 194 cotton mills, having a total capital of 268,370,000 milreis, employing 51,992 mill hands, and turning out annually goods valued at 171,110,000 milreis. The annual output of manufactured cotton is estimated at 234,984,587 meters.

The State of Minas Geraes has the largest number of mills, 36, followed by the State of Sao Paulo, with 23. Next in order comes the State of Rio de Janeiro, with 19, and the Federal District, with 15.

The jute mills represent an investment of 15,800,000 milreis, with a total production valued at 22,390,000 milreis.

The woolen industry occupies third place in textile manufactures, with a total capital of 14,848,000 milreis. The annual production is worth 11,375,000 milreis, and the number of employees is 1,957.

The total amount invested in the silk industry is estimated at 965,000 milreis, and the annual output at 1,042,000 milreis, while there are 244 persons employed in this industry.

The total amount invested in the linen industry is estimated at 1,230,000 milreis, while in the manufacture of aramina, 1,500,000 milreis are invested.

## IMPORTS OF WHEAT FLOUR.

SOUTHARD P. WARNER, the United States Consul at Bahia, Brazil, submits the following table showing the total imports of wheat flour into Brazil during the five years 1905 to 1909, and the quantities imported from the United States:

| | Total imports. | United States. | |
|---|---|---|---|
| | | Tons.[a] | Per cent of total. |
| 1905 | 140,464 | 20,000 | 14.2 |
| 1906 | 153,946 | 24,526 | 15.9 |
| 1907 | 170,253 | 29,543 | 17.4 |
| 1908 | 151,076 | 25,712 | 17.0 |
| 1909 | 146,305 | 26,525 | 18.1 |
| Total | 762,044 | 126,306 | 16.6 |

[a] Metric ton, 2,204.6 pounds.

## TRADE OPPORTUNITIES.

The United States Consul at Pernambuco advises that Brazil should afford a lucrative market for canned goods of United States manufacture.

Catalogues on typewriters, refrigerators, pianos, scales, windmills, school and office furniture, photographic appliances, clocks and watches, paints and varnishes, and flour would find interested readers at Santos, Brazil.

## SPECIAL INDUCEMENTS FOR THE SALE OF LANDS IN THE STATE OF PARÁ.

The legislature of the State of Para offers special inducements for the sale of lands in the northern part of the State, especially in Brazilian Guiana. Lands suitable for cultivation or cattle breeding, situated along navigable rivers or railways, can be purchased at the ridiculously low price of 1 milreis per hectare to the number of 100 hectares; from 100 to 1,000 hectares may be purchased at the price of 1 milreis 100 reis per hectare; from 1,000 to 2,000 hectares, at 1 milreis 200 reis per hectare, the price increasing 100 reis for each additional 1,000 hectares.

Agricultural and grazing lands which are more than 6 kilometers distant from rivers and railways, will be sold at a 50 per cent reduction on these prices. Lands suitable for rubber culture are valued at 100 per cent above the foregoing prices, while those situated in unexplored sections of the State will be sold at one-half the above prices. Many of these lands are covered with hardwood trees, especially the rosewood.

## REPRESENTATION AT THE CONGRESS OF RACES.

Dr. João Baptista de Lacerda, Director of the National Museum at Rio de Janeiro, has been invited to prepare a paper on the mixed races of Brazil for the Congress of Races which meets at London next December.

## PROPOSED AGRICULTURAL CONGRESS

The Agricultural Association of the State of Minas is making arrangements for an agricultural congress at Bello Horizonte, in that State, some time during the current year, in which all agricultural associations of the country will be invited to take part. Dr. Lourenço Baeta Neves, the Brazilian delegate to the Irrigation Congress at Albuquerque, N. Mex., and to the Dry-Farming Congress of Cheyenne, Wyo., is one of the active organizers of the Congress.

## REPRESENTATION AT THE RUBBER EXHIBITION IN LONDON.

The Brazilian Government will be represented at the Second International Rubber and Allied Trades Exhibition, which will be held at London, June 24 to July 11, and has reserved a space of 8,000 square feet.

## SHIP REPAIR YARD FOR RIO DE JANEIRO.

A consular report from the Vice Consul General at Rio indicates that the Lloyd Brazileiro has recently closed a contract with a United States firm for machinery and other equipment for a ship repair yard

at Rio de Janeiro. This contract represents a $500,000 transaction, and explicitly states that all of the machinery and materials shall be of American manufacture. The plant is to be fully equipped and ready for operation within one year. When the plant has been placed in good working order and the workmen have become thoroughly familiar with the operation of the machinery, a complete shipbuilding yard will be installed. The repair yards which the present contract provides for will probably be the most important in South America.

### BIDS FOR STEAMSHIP SERVICE BETWEEN BELEM AND MANAOS.

The Department of Communications and Public Works has called for bids for the navigation service between Belem and Manaos. The contract with the Amazon Steamship Navigation Co. has expired.

### NEW STEAMSHIP SERVICE.

The "Jornal do Commercio" states that Mr. EUGENIO DAHNE and Dr. GASTÃO NETTO DOS REIS, an official of the Department of Agriculture of Brazil, left early in March for the United States to represent their Government at the inauguration of the steamship line between New Orleans and Rio, in connection with "The Brazilian Colonization and Development Co.," of St. Louis, as announced in the last issue of the BULLETIN. Mr. SIDNEY STORY, vice president of "The Mississippi Valley and South American Steamship Co.," has been in Brazil since early in the year, making the preliminary arrangements for the new service.

Mr. DAHNE will be remembered as the commissioner sent by the Brazilian Government to this country last year to make a special study of agriculture and immigration.

### NEW COASTWISE SERVICE.

The Pernambuco Navigation Co. has been awarded the contract for the establishment of a steamship service between Recife (Pernambuco) and Amarracao, Recife and Aracaju, and Recife and Fernando de Noronha and Roccas.

According to the terms of the contract, the company will establish three distinct services, namely:

Northern line: Two round trips per month from Recife to Amarracao, making calls at Cabedello, Natal, Macao, Mossoro Aracaty, Fortaleza, and Camocim.

Southern line: Two round trips monthly between Recife and Aracaju, with stops at Jaragua, Villa Nova, and Penedo.

Central line: Vessels will make one round trip per month between Recife and Fernando de Noronha and Roccas.

With the consent of the company, the Government may make changes in the itinerary of the northern and southern lines.

Five steamships will be employed in this service, having a speed of 10 miles per hour, and with accommodations for 30 first-class passengers and 50 third-class passengers and 200 metric tons of freight. The service must be inaugurated within twelve months from the date of the contract.

The company will receive an annual subsidy from the Government of 99,995 milreis (approximately $30,000).

### PRECIOUS STONES.

Mr. E. Bohrer Booges, representing a prominent lapidary firm of Germany, has been making an extensive visit in Brazil with the view of acquiring tourmalines, beryls, and other precious stones. During the past two years he has shipped to his country some 500 kilos of these products. It is stated that he recently forwarded to Germany a block of beryl weighing 115 kilos and valued at 58 contos of reis (about $17,000). This was found in a place called Marambaya, in Arassuahy, Minas Geraes. Its dimensions are said to be 80 by 24 by 23.

### IRON-ORE DEPOSITS.

According to "The Iron and Coal Trades Review," an English syndicate has secured large iron-ore deposits in Brazil and is making arrangements for their mining and shipment to that country on a large scale. It is stated that the deposits are capable of supplying a very high class of hematite iron ore for many years.

### REGULATIONS OF THE WIRELESS TELEGRAPH SERVICE.

The "Diario Official," of February 8, 1911, contains the regulations governing the wireless telegraph service in Brazil.

### REPORT OF LEOPOLDINA RAILWAY, 1910.

The year 1910 was a very profitable one for the "Leopoldina Railway Co.," the receipts exceeding those of any previous year. The increase in operating revenue over the preceding year was £100,000, or 8.3 per cent, the gross revenues amounting to £1,316,000. It is expected that the company will be able to pay a dividend of 3¾ per cent, or an increase of one-half per cent.

The total length of the company's lines in operation is 1,580 miles. The company has within the last few years contracted for the construction of 570 kilometers of new lines at a cost of £2,000,000.

### PROGRESS ON THE GOYAZ RAILWAY.

The total length of the main line of the Goyaz Railway and its branches is 1,400 kilometers. The surveys for both trunk and branches are now completed. It is stated that about 1,500 men are now employed on the different sections. Rails have been laid for a

distance of 138 kilometers from Formiga, and the line will soon be open to traffic as far as kilometer 130. The roadbed is now completed for a distance of 143 kilometers.

### RAILWAY NOTES.

The Government has approved the definite surveys and estimates of the branch of the Mogyana Railway, extending from Mogy-Mirim to Santos.

### BRAZILIAN RAILROADS OPENED TO TRAFFIC IN 1910.

The railway construction in Brazil during the year 1910 represents the most notable progress of the past decade, according to J. J. SLECHTA, the United States Vice Consul General at Rio, and points to a rapid development of the interior districts by placing them in better communication with consuming markets, as well as by opening them to the outside world as markets for foreign goods.

The total mileage added to the railroads already in traffic exceeds the gain in any previous year, and is characterized by a greater distribution throughout the country and by a marked tendency to unify the several systems in the Republic. The railroads, extensions, and branches opened to traffic during 1910 were as follows:

UNDER FEDERAL ADMINISTRATION.

| | Miles. |
|---|---|
| Central Brazil Railway: | |
| Lassance to Pirapora (Minas Geraes) | 87 |
| Caethe to Rancho Novo (Minas Geraes) | 14 |
| Santa Cruz to Itacurussa (Federal District and Rio) | 18 |
| West of Minas Railroad: | |
| Bello Horizante to Capella Nova (Minas Geraes) | 25 |
| Rio Claro to Alto da Serra (Rio de Janeiro) | 17 |
| Cruz Alta to Ijuhy Railway: | |
| Cruz Alta to Fachinal (Rio Grande do Sul) | 19 |
| Total | 180 |

UNDER FEDERAL CONCESSION AND CONTROL.

| | |
|---|---|
| Madeira-Marmore Railway: | |
| Porto Velho to Kilometer 152 (M. Grosso) | 95 |
| Baturite Railway: | |
| Miguel Calmon to Iguatu (Ceara) | 49 |
| Sobral Railway: | |
| Ipu to Novas Russas (Ceara) | 38 |
| Rio Grande do Norte Central Railway: | |
| Taipu to Baixa Verde (Rio Grande do Norte) | 17 |
| Great Western Railway Company: | |
| Pesqueira to Barra (Pernambuco) | 8 |
| Tamatahy to Grassas (Parahyba) | 6 |
| Timbo to Propria Railway: | |
| Esplanada to Apora (Bahia) | 12 |

| | Miles. |
|---|---|
| Leopoldina Railway: | |
| Muniz Freire to Mathilde (Espirito Santo) | 50 |
| Northwestern of Brazil Railway: | |
| Anhangahy to Itapura (Sao Paulo) | 60 |
| Itapura to Jupia (Sao Paulo) | 15 |
| Victoria and Minas Railway: | |
| Derrubadinha to Baguary (Minas Geraes) | 21 |
| Curralinho to Santo Hyppolito (Minas Geraes) | 24 |
| Brazil Federal Railway: | |
| Baependy to Fazendinha (Minas Geraes) | 8 |
| Alfenas Branch (Minas Geraes) | 5 |
| Goyaz Railway: | |
| Franklin Sampaio to Bambuhy (Minas Geraes) | 20 |
| Paulista Railway: | |
| Baurú to Pederneiras (Sao Paulo) | 24 |
| Sao Paulo-Rio Grande Railway: | |
| Affonso Penna to Uruguay River (Rio Grande do Sul) | 164 |
| Sao Francisco to Hansa (Santa Catharina) | 60 |
| Compagnie Auxiliaire des Chemins de Fer: | |
| Passo Fundo to Rio Uruguay (Rio Grande do Sul) | 111 |
| Rosario a Santa Anna de Livramento (Rio Grande do Sul) | 67 |
| Montenegro to Ligacao (Rio Grande do Sul) | 32 |
| Santa Luiza to Caxias (Rio Grande do Sul) | 27 |
| Total | 913 |

STATE CONTROLLED.

| | |
|---|---|
| Dourado Railway: | |
| Trabiju to Sao Joao da Bocaina (Sao Paulo) | 25 |
| Sao Joao das Tres Barras to Ibatinga (Sao Paulo) | 13 |
| Sao Paulo-Goyaz Railway: | |
| Bebedouro to Monte Azul (Sao Paulo) | 19 |
| Araraquara Railway: | |
| Santa Adelia to Santa Isabel (Sao Paulo) | 25 |
| Brazil Federal Railway: | |
| Piranguinho to Villa Braz (Minas Geraes) | 14 |
| Total | 96 |
| Grand total | 1,189 |

Of this total given for mileage opened to traffic probably about one-half was actually built during the year 1910.

# CHILE

## BIDS FOR VALPARAISO AND SAN ANTONIO PORT WORKS.

The Chilean Legation in Washington, in accordance with instructions from its Government, has issued a call for bids for the carrying out of extensive maritime works for the improvement of the ports of

Valparaiso and San Antonio. The amounts allowed for these works are as follows:

| | |
|---|---|
| Port of Valparaiso | £2,222,000 |
| Port of San Antonio | 783,000 |
| Total | 3,005,000 |

The bids will be opened in Santiago on July 22, 1911. All informa tion concerning the same may be obtained from the Chilean Legation, Washington, D. C.

The cost of these important works will be covered from the proceeds of the £4,905,000 loan issued in London on January 24, 1911.

### BIDS FOR RAILWAY TIES.

The Government railways have asked for bids for furnishing 290,000 ties for immediate use in the railway construction of the country. These ties are to be delivered between April 1 and July 1 of the present year.

### BIDS FOR WATERWORKS CONSTRUCTION.

The Director General of Public Works, Santiago, Chile, has asked for bids for the construction of waterworks at Orsono and Casablanca at an estimated cost of $30,209 and $6,918, respectively. There is a general demand for waterworks supplies, according to the United States Consul at Valparaiso, as the Government is pushing the matter for furnishing a better water supply for the towns and cities in the Republic.

### FOREIGN COMMERCE OF CHILE, 1910.

A most interesting and comprehensive report, covering the social, political, commercial, and industrial development of Chile for the year 1910, has just been prepared and submitted by Alfred A. Winslow, the United States Consul at Valparaiso. He states in this report that the general interests of Chile enjoyed a better year during 1910 than in 1909, and that the prospects are extremely bright for an even more prosperous period during the current year. The report is illuminated by numerous comparative tables covering the export and import trade of the country for several years back, and a general résumé of the various activities of the Government is included.

The total value of imports for 1910 amounted to $108,627,188, as compared with $95,355,640 for 1909 and $97,202,960 for 1908. The total exports for 1910 are given as $115,792,811, as compared with $106,636,013 for 1909 and $114,571,027 for 1908. All values are here given in United States gold.

The following are the detailed statements of the imports, by countries or origin as well as by products, for the years 1908, 1909, and 1910.

DETAIL OF IMPORTATION, 1908.

| Country of origin. | Animal products. | Vegetable products. | Mineral products. | Textiles. | Oil and coal. | Paper. | Liquors. | Chemical products. | Machinery. | Arms. | Miscellaneous. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Great Britain | $741,848 | $1,654,475 | $6,456,157 | $8,208,927 | $5,949,173 | $349,563 | $467,781 | $420,964 | $6,014,590 | $226,818 | $140,513 | $30,630,809 |
| Germany | 685,020 | 1,570,225 | 6,396,493 | 5,739,650 | 1,013,519 | 1,275,474 | 265,279 | 887,006 | 9,068,898 | 285,081 | 368,490 | 27,555,784 |
| United States | 545,312 | 1,212,894 | 822,594 | 531,273 | 1,961,432 | 796,036 | 13,185 | 207,722 | 2,502,349 | 62,408 | 45,084 | 8,697,289 |
| Australia | 686 | 2,389 | 353 | 10,160 | 6,252,830 | | 196 | | | | | 6,206,614 |
| Belgium | 123,979 | 23,147 | 2,511,449 | 305,794 | 24,119 | 62,057 | 19,155 | 13,331 | 1,397,614 | 14,588 | 59,725 | 4,555,758 |
| France | 489,184 | 302,939 | 556,179 | 1,507,694 | 48,795 | 110,307 | 540,985 | 358,547 | 283,234 | 13,212 | 144,771 | 4,355,845 |
| Argentina | 3,537,875 | 122,695 | 12,035 | 124,704 | 2,965 | 15,626 | 359 | 2,547 | 7,429 | | 19,587 | 3,845,824 |
| Peru | 121,144 | 1,763,259 | 55,061 | 38,847 | 1,714,087 | 5,095 | 659 | 12,566 | 1,988 | 1,152 | 6,074 | 3,719,932 |
| India | | 245,840 | 5,256 | 2,513,202 | | | | | 3,593 | | | 2,767,891 |
| Italy | 66,147 | 610,579 | 91,313 | 1,069,969 | 9,166 | 80,333 | 218,789 | 56,877 | 28,756 | 239 | 9,671 | 2,241,840 |
| Spain | 107,890 | 99,263 | 7,260 | 242,072 | 3,186 | 94,204 | 202,540 | 1,279 | 16,909 | 15,644 | 8,771 | 977,018 |
| Uruguay | 203,956 | 141,471 | 44 | 493 | 29 | 3,450 | 137 | | 941 | | 3,586 | 354,017 |
| Brazil | 1,237 | 247,956 | | | | 767 | | | | | 88 | 250,048 |
| Ecuador | 221,213 | 7 | 8,115 | 3,909 | | | 137 | 2,385 | 117 | | 63 | 236,946 |
| Switzerland | 44,881 | 2,405 | 65,366 | 15,537 | | 376 | 207 | 1,121 | 392 | 91 | 5,317 | 135,693 |
| Austria | 6,291 | 15,583 | 3,026 | 8,523 | 431 | 525 | 92,194 | 3,517 | 889 | 2,003 | 2,582 | 135,564 |
| Cuba | 95,255 | | | | | 3,323 | 3,312 | | | | | 101,890 |
| Portugal | 3,415 | 4,122 | 238 | 84 | | 41 | 47,667 | | | | 301 | 55,868 |
| Norway | 3,370 | 36,601 | 1,314 | 35 | 1,264 | 5,232 | | | 1,017 | | 82 | 48,715 |
| Bolivia | 8,524 | 2,045 | 20,056 | | | | | 13,657 | 12 | | 946 | 47,918 |
| China | 1,709 | 19,467 | 854 | 12,252 | 8 | 384 | 158 | 561 | 92 | 11,912 | 636 | 48,033 |
| Holland | 11,806 | 9,325 | 7,514 | 584 | 2,125 | 349 | 10,078 | 638 | 2,339 | | 2,243 | 47,201 |
| Japan | 2,581 | 4,315 | 2,866 | 29,029 | 1,967 | 1,124 | 97 | 7 | | | 1,980 | 43,966 |
| Other countries | 79,984 | 125,170 | 4,357 | 37,907 | 1,072 | 3,265 | 974 | 361 | 5,363 | | 2,344 | 260,797 |
| Total | 6,786,839 | 8,540,045 | 17,020,090 | 20,407,329 | 16,990,077 | 2,808,331 | 1,883,792 | 1,983,176 | 19,336,529 | 633,148 | 822,854 | 97,202,960 |

DETAIL OF IMPORTATION, 1909.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Great Britain | $678,632 | $1,493,931 | $6,185,639 | $10,412,753 | $7,365,206 | $311,778 | $466,306 | $479,511 | $3,987,823 | $292,488 | $168,679 | $31,842,746 |
| Germany | 738,969 | 1,704,323 | 6,365,454 | 5,512,716 | 864,816 | 1,352,571 | 234,964 | 817,347 | 4,122,729 | 352,253 | 369,899 | 22,436,041 |
| United States | 431,261 | 1,299,001 | 1,495,919 | 744,498 | 3,332,720 | 485,079 | 8,236 | 232,282 | 1,396,477 | 96,104 | 79,507 | 9,601,084 |
| Argentina | 6,386,801 | 90,387 | 10,025 | 60,407 | 247 | 18,169 | 60 | 9,464 | 19,266 | | 2,228 | 6,617,054 |
| France | 776,459 | 402,963 | 780,878 | 2,214,088 | 34,837 | 118,615 | 613,728 | 353,295 | 196,098 | 10,685 | 161,849 | 5,663,495 |
| Peru | 236,167 | 2,721,470 | 8,329 | 49,997 | 1,681,476 | 5,696 | 336 | 8,091 | 4,480 | 17,963 | 3,727 | 4,737,727 |
| Australia | 1,944 | | 328 | | 3,191,815 | | | | | | | 3,201,287 |
| Belgium | 133,401 | 43,359 | 1,775,124 | 271,521 | 48,162 | 62,451 | 17,580 | 29,697 | 350,897 | 9,271 | 9,311 | 2,751,774 |
| Italy | 86,410 | 836,028 | 113,768 | 1,139,784 | 7,998 | 81,182 | 235,667 | 49,641 | 67,191 | 474 | 11,756 | 2,579,899 |
| India | | 245,936 | | 2,305,570 | | | | | | | | 2,551,506 |
| Spain | 1,188,599 | 166,320 | 3,726 | 243,615 | 2,830 | 84,478 | 235,667 | 6,104 | 14,783 | 18,224 | 8,680 | 903,026 |
| Uruguay | 255,461 | 252,844 | 14,599 | 1,445 | 14 | 3,364 | | 1,762 | 2,452 | | 1,610 | 533,551 |
| Brazil | 3,878 | 471,928 | 1,079 | | | 456 | 1,287 | | | | 322 | 478,950 |
| Ecuador | 182 | 436,067 | | 7,323 | | | 81 | 1,520 | | | | 445,133 |
| Switzerland | 60,063 | 3,181 | 51,025 | 6,592 | | 445 | 12,988 | | 3,498 | 365 | 134 | 138,291 |

DETAIL OF IMPORTATION, 1909—Continued.

| Country of origin. | Animal products. | Vegetable products. | Mineral products. | Textiles. | Oil and coal. | Paper. | Liquors. | Chemical products. | Machinery. | Arms. | Miscellaneous. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bolivia | $4,687 | $3,482 | $27,383 | $65,446 | ..... | $234 | $1,225 | $19,003 | $162 | ..... | $54 | $121,687 |
| Austria | 8,296 | 15,658 | 1,627 | 280 | $1,384 | 65,742 | 180 | 798 | 954 | $2,516 | 2,516 | 114,399 |
| Cuba | 4,945 | 107,542 | 33 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 112,520 |
| Panama | 4,570 | 68,672 | 838 | 2,799 | ..... | 2,121 | 213 | 2,136 | 1,707 | 2 | 68 | 83,126 |
| Portugal | 14,410 | 2,641 | ..... | ..... | 271 | 3 | 60,619 | ..... | 1,984 | ..... | ..... | 79,928 |
| Holland | 10,443 | 13,958 | 4,273 | 1,684 | 403 | 815 | 492 | ..... | 2,336 | 19,854 | 171 | 54,429 |
| Guatemala | 48,238 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 48,238 |
| Japan | 1,367 | 5,027 | 3,355 | 28,493 | ..... | 1,150 | 511 | 808 | ..... | 1,879 | 2,170 | 44,760 |
| Norway | 2,440 | 27,734 | 7 | 54 | 102 | 7,558 | ..... | ..... | 1,098 | ..... | 65 | 39,058 |
| Other countries | 106,008 | 48,258 | 2,059 | 5,057 | 1,182 | 376 | 304 | 5,564 | 1,103 | 7,800 | 221 | 177,931 |
| Total | 10,065,394 | 10,508,948 | 16,845,468 | 23,090,729 | 16,532,359 | 2,537,925 | 1,956,006 | 2,016,405 | 10,174,882 | 828,316 | 842,967 | 95,355,640 |

DETAIL OF IMPORTATION, 1910.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Great Britain | $753,683 | $1,676,703 | $5,962,177 | $12,156,918 | $8,691,669 | $407,458 | $596,567 | $613,639 | $2,739,225 | $504,800 | $237,735 | $34,340,573 |
| Germany | 689,618 | 1,911,614 | 7,507,759 | 7,486,407 | 1,037,557 | 1,745,651 | 348,751 | 847,956 | 3,266,020 | 762,941 | 691,787 | 26,296,071 |
| United States | 568,771 | 1,318,763 | 2,431,407 | 817,003 | 4,147,655 | 769,072 | 18,222 | 298,628 | 2,724,965 | 215,470 | 59,818 | 13,369,774 |
| France | 943,142 | 449,857 | 872,036 | 2,637,177 | 78,243 | 118,991 | 772,756 | 394,625 | 310,967 | 27,021 | 406,114 | 7,010,929 |
| Argentina | 5,242,138 | 58,503 | 68,027 | 50,152 | 126 | 25,345 | 410 | 5,878 | 24,512 | 17 | 2,694 | 5,477,808 |
| Peru | 267,042 | 3,225,954 | 7,282 | 38,934 | 1,851,285 | 672 | 1,588 | 42,499 | 4,273 | 4,984 | 1,476 | 5,445,989 |
| India | ..... | 346,711 | ..... | 3,671,269 | ..... | ..... | ..... | ..... | ..... | ..... | 270 | 4,018,250 |
| Italy | 80,484 | 693,490 | 257,494 | 1,510,659 | 2,432 | 118,056 | 349,148 | 85,322 | 95,030 | 10,701 | 25,037 | 3,227,853 |
| Australia | 103,968 | ..... | ..... | 4,216 | 2,609,633 | ..... | ..... | 1,460 | 1,379 | ..... | ..... | 2,720,156 |
| Belgium | 140,776 | 32,112 | 1,343,569 | 358,061 | 75,472 | 72,933 | 12,221 | 17,550 | 292,573 | 20,340 | 8,334 | 2,464,941 |
| Spain | 139,092 | 257,349 | 166,950 | 225,668 | 67 | 82,902 | 268,502 | 4,082 | 41,895 | 20,568 | 12,629 | 1,349,700 |
| Brazil | ..... | 277,898 | ..... | 1,045 | ..... | 11 | ..... | 27 | 175 | ..... | ..... | 724,247 |
| Ecuador | ..... | 454,321 | 171 | 4,612 | ..... | ..... | 66 | 1,656 | ..... | ..... | 2,666 | 463,493 |
| Uruguay | 95,411 | 237,670 | 5 | 3,332 | 3 | 4,919 | 1,100 | 80 | 3,077 | 40 | 3,133 | 348,770 |
| Holland | 10,499 | 14,162 | 3,577 | 1,001 | 283,012 | 451 | 17,659 | 277 | 509 | 23 | 33 | 331,203 |
| Switzerland | 69,919 | 6,820 | 75,433 | 34,940 | 2 | 1,987 | 298 | 1,026 | 535 | 7 | 9,980 | 200,997 |
| Austria | 11,002 | 6,920 | 2,854 | 11,475 | 80 | 688 | 101,785 | 2,106 | 923 | 98 | 6,446 | 144,377 |
| Portugal | 9,956 | 2,933 | 5,904 | ..... | ..... | 22 | 90,574 | ..... | ..... | ..... | ..... | 109,389 |
| Cuba | ..... | 102,456 | ..... | ..... | ..... | 1 | 1,643 | 4 | ..... | ..... | ..... | 104,103 |
| Bolivia | 38,740 | 2,085 | 24,169 | 15,913 | ..... | 150 | 95 | 1,054 | 761 | 2,512 | 94 | 85,575 |
| Japan | 4,085 | 16,470 | 1,949 | 45,182 | 85 | 1,019 | 164 | 5,945 | 148 | 1,903 | 7,815 | 84,765 |
| Guatemala | ..... | 83,036 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 83,036 |
| China | 6,386 | 31,138 | 685 | 10,123 | ..... | 475 | 545 | 1,590 | 156 | 21,152 | 1,438 | 73,688 |
| Panama | 1,834 | 41,419 | 118 | 473 | ..... | 4,085 | 307 | 120 | 1,560 | ..... | 88 | 50,004 |
| Other countries | 70,508 | 56,337 | 2,576 | 3,273 | 990 | 5,962 | 1,563 | 531 | 4,190 | ..... | 865 | 146,785 |
| Total | 9,072,578 | 11,797,492 | 18,822,566 | 29,114,560 | 18,777,322 | 3,354,888 | 2,582,401 | 2,325,534 | 9,508,683 | 1,598,489 | 1,471,675 | 108,627,188 |

Herewith is an interesting comparative trade statement covering imports into Chile for the past six years from England, Germany, France, and the United States.

COMPARATIVE TRADE STATEMENT.

| Subjects. | Year. | England. | Germany. | United States. | France. |
|---|---|---|---|---|---|
| Animal products | 1905 | $574,566 | $646,876 | $305,870 | $550,182 |
| | 1906 | 552,557 | 605,483 | 466,738 | 577,785 |
| | 1907 | 1,071,745 | 997,142 | 919,159 | 822,335 |
| | 1908 | 741,848 | 685,020 | 545,312 | 489,184 |
| | 1909 | 678,632 | 738,969 | 431,261 | 776,459 |
| | 1910 | 753,683 | 689,618 | 568,771 | 943,142 |
| Vegetable products (including fruits, grains, lumber, tobacco, etc.) | 1905 | 748,926 | 906,069 | 1,203,227 | 226,406 |
| | 1906 | 1,814,476 | 1,546,462 | 1,660,440 | 281,477 |
| | 1907 | 654,475 | 1,570,225 | 2,212,894 | 302,939 |
| | 1908 | 1,098,521 | 1,693,315 | 1,284,957 | 414,115 |
| | 1909 | 1,493,931 | 1,704,323 | 1,299,001 | 402,963 |
| | 1910 | 1,676,703 | 1,911,614 | 1,318,763 | 449,857 |
| Mineral products (including iron and steel bars, plates, rods, cement, building hardware, etc.) | 1905 | 5,798,039 | 4,857,506 | 992,282 | 719,734 |
| | 1906 | 6,501,204 | 6,111,267 | 883,640 | 1,087,710 |
| | 1907 | 9,006,858 | 7,926,572 | 1,455,746 | 798,969 |
| | 1908 | 6,456,157 | 6,396,493 | 822,594 | 556,179 |
| | 1909 | 6,185,639 | 6,365,454 | 1,495,919 | 780,878 |
| | 1910 | 5,962,177 | 7,507,759 | 2,431,407 | 872,036 |
| Textiles | 1905 | 8,827,770 | 4,826,275 | 705,002 | 2,808,087 |
| | 1906 | 9,278,112 | 4,551,909 | 552,973 | 2,151,756 |
| | 1907 | 12,147,909 | 6,515,336 | 711,074 | 2,098,324 |
| | 1908 | 8,208,927 | 5,739,650 | 531,273 | 1,507,694 |
| | 1909 | 10,412,753 | 5,512,716 | 744,498 | 2,214,088 |
| | 1910 | 12,156,918 | 7,486,407 | 817,003 | 2,637,177 |
| Oils, coal, etc | 1905 | 6,163,537 | 648,368 | 1,172,874 | 65,842 |
| | 1906 | 6,059,228 | 740,517 | 1,289,869 | 44,917 |
| | 1907 | 8,826,542 | 1,128,425 | 1,383,235 | 51,369 |
| | 1908 | 5,449,173 | 1,013,519 | 1,961,432 | 48,795 |
| | 1909 | 7,365,206 | 864,816 | 3,332,720 | 34,837 |
| | 1910 | 8,691,669 | 1,037,557 | 4,147,655 | 78,243 |
| Paper, etc | 1905 | 154,053 | 600,292 | 370,428 | 82,599 |
| | 1906 | 266,318 | 1,051,788 | 370,154 | 105,028 |
| | 1907 | 332,730 | 1,313,291 | 500,366 | 139,291 |
| | 1908 | 349,563 | 1,275,474 | 796,036 | 110,307 |
| | 1909 | 311,778 | 1,352,571 | 485,079 | 118,615 |
| | 1910 | 407,458 | 1,745,651 | 769,072 | 118,991 |
| Wines and liquors | 1905 | 266,885 | 101,050 | 10,592 | 232,122 |
| | 1906 | 374,315 | 147,463 | 15,298 | 316,721 |
| | 1907 | 558,521 | 332,637 | 24,300 | 641,602 |
| | 1908 | 467,781 | 265,279 | 13,185 | 540,985 |
| | 1909 | 466,306 | 234,964 | 8,236 | 613,728 |
| | 1910 | 596,567 | 348,751 | 18,222 | 772,756 |
| Chemicals, perfumery, etc | 1905 | 265,210 | 442,125 | 115,340 | 253,625 |
| | 1906 | 273,246 | 521,907 | 193,523 | 294,048 |
| | 1907 | 484,385 | 850,059 | 235,801 | 426,139 |
| | 1908 | 420,964 | 887,206 | 207,722 | 358,547 |
| | 1909 | 479,511 | 817,347 | 232,282 | 353,295 |
| | 1910 | 613,639 | 847,966 | 298,628 | 394,625 |
| Machinery | 1905 | 2,971,047 | 3,866,989 | 1,961,692 | 204,299 |
| | 1906 | 6,653,400 | 4,550,063 | 2,229,237 | 326,066 |
| | 1907 | 7,351,153 | 5,467,176 | 3,101,783 | 395,531 |
| | 1908 | 6,014,590 | 9,068,898 | 2,502,349 | 283,234 |
| | 1909 | 3,987,823 | 4,122,729 | 1,396,477 | 196,098 |
| | 1910 | 2,739,225 | 3,266,020 | 2,724,965 | 310,967 |
| Arms, etc | 1905 | 134,073 | 350,957 | 38,712 | 10,172 |
| | 1906 | 66,796 | 350,282 | 76,743 | 20,941 |
| | 1907 | 380,617 | 642,817 | 103,843 | 23,885 |
| | 1908 | 226,818 | 285,081 | 62,408 | 13,212 |
| | 1909 | 292,488 | 352,253 | 96,104 | 10,685 |
| | 1910 | 504,800 | 762,941 | 215,470 | 27,021 |
| Various | 1905 | 55,703 | 123,360 | 11,781 | 39,354 |
| | 1906 | 53,659 | 127,839 | 36,299 | 38,985 |
| | 1907 | 169,488 | 256,431 | 39,716 | 72,391 |
| | 1908 | 140,513 | 368,490 | 45,084 | 144,771 |
| | 1909 | 168,679 | 369,899 | 79,507 | 161,849 |
| | 1910 | 237,735 | 691,787 | 59,818 | 406,114 |
| Totals | 1905 | 25,959,809 | 17,370,467 | 6,886,800 | 5,192,422 |
| | 1906 | 30,893,311 | 20,304,980 | 8,774,914 | 5,245,604 |
| | 1907 | 41,428,469 | 27,123,091 | 11,360,400 | 5,884,151 |
| | 1908 | 30,630,809 | 27,555,784 | 8,697,289 | 6,286,614 |
| | 1909 | 31,842,746 | 22,436,041 | 9,601,084 | 6,617,054 |
| | 1910 | 34,340,573 | 26,296,071 | 13,369,774 | 7,010,929 |

Particular attention is directed to the steady increase in the imports from the United States. Though the year 1907 represented an abnormal growth, including heavy importations of building material and lumber for rebuilding the damaged city of Valparaiso, the year 1910 is positively normal and represents a revival of the natural industrial advancement of the country. It will be noted that for the period named the imports from the United States have increased very nearly 100 per cent.

As has already been noted, the exports for the year 1910 exceeded those of 1909 by $9,156,798. The following tables show the detailed distribution of exports for the past three years:

DETAIL OF EXPORTATION, 1908.

| Country of destination. | Animal products. | Vegetable products. | Mineral products. | Wine and liquors. | Cash. | Varias. | Total. |
|---|---|---|---|---|---|---|---|
| Great Britain | $3,631,225 | $5,371,171 | $45,384,261 | $354 | $13,687 | $16,234 | $54,424,932 |
| Germany | 1,525,492 | 1,091,718 | 21,728,637 | 17,580 | 3,212 | 311,365 | 24,678,004 |
| United States | 73,473 | 111,684 | 15,858,588 | 44 | ..... | 6,326 | 16,050,387 |
| France | 595,178 | 79,402 | 6,244,076 | 68 | 365 | 57,870 | 6,976,959 |
| Peru | 108,733 | 943,678 | 127,454 | ..... | 36,500 | 35,243 | 1,252,642 |
| Italy | 16,934 | 32,905 | 511,725 | 43 | ..... | 588 | 562,198 |
| Belgium | 30,830 | 50,750 | 3,077,166 | 1,034 | ..... | 1,269 | 3,160,015 |
| Holland | 16,831 | 90,773 | 2,497,677 | ..... | ..... | 1,024 | 2,606,305 |
| Spain | ..... | 734 | 699,478 | ..... | ..... | 657 | 700,869 |
| Argentina | 15,181 | 548,481 | 412,991 | 37,085 | ..... | 3,509 | 1,017,347 |
| Bolivia | 25,701 | 139,672 | 1,315 | 13,445 | ..... | 26,606 | 208,739 |
| Portugal | ..... | 4,060 | 1,340,859 | ..... | ..... | ..... | 1,244,919 |
| Uruguay | 623 | 129,519 | 2,207 | 2,230 | ..... | 7,563 | 142,142 |
| Brazil | 3,456 | 176,443 | 6,204 | 241 | ..... | 577 | 186,921 |
| Austria | ..... | ..... | 484,431 | ..... | ..... | ..... | 484,431 |
| Ecuador | 4,318 | 50,315 | 218 | 5,452 | ..... | 4,177 | 64,480 |
| Islands Malvinas | 1,219 | 10,022 | ..... | 242 | ..... | 675 | 11,916 |
| Other countries | 146 | 15,188 | 783,740 | ..... | ..... | 508 | 799,824 |
| Total | 6,057,610 | 8,846,617 | 99,161,027 | 67,818 | 53,764 | 474,191 | 114,571,027 |

DETAIL OF EXPORTATION, 1909.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Great Britain | $5,331,180 | $7,248,424 | $32,341,806 | $358 | ..... | $6,657 | $44,928,425 |
| Germany | 1,574,184 | 1,084,937 | 21,154,027 | 634 | ..... | 28,159 | 23,841,981 |
| United States | 194,253 | 13,711 | 19,441,743 | 8 | ..... | 1,764 | 19,649,707 |
| France | 945,633 | 87,950 | 4,133,935 | 195 | ..... | 49,096 | 5,216,909 |
| Holland | 4,863 | 26,912 | 3,324,031 | ..... | ..... | 164 | 3,355,970 |
| Belgium | 109,349 | 103,398 | 2,675,473 | ..... | ..... | 220 | 2,888,440 |
| Peru | 109,272 | 764,298 | 154,920 | 582 | ..... | 2,745 | 1,030,818 |
| Argentina | 8,407 | 726,923 | 10,072 | 40,260 | ..... | 7,518 | 793,180 |
| Italy | 35 | 2,767 | 996,450 | 101 | ..... | 788 | 1,000,141 |
| Cape Colony | ..... | ..... | 757,926 | ..... | ..... | ..... | 757,926 |
| Bolivia | 33,963 | 609,633 | 523 | 7,618 | ..... | 9,347 | 661,084 |
| Spain | 110 | 850 | 525,399 | ..... | ..... | 1,825 | 528,184 |
| Poland | ..... | ..... | 398,499 | ..... | ..... | ..... | 398,499 |
| Japan | 43 | ..... | 394,462 | 11 | ..... | ..... | 394,516 |
| Canada | ..... | ..... | 305,052 | ..... | ..... | ..... | 305,352 |
| Austria | ..... | ..... | 217,579 | ..... | ..... | ..... | 217,579 |
| Uruguay | 80 | 175,623 | ..... | 1,229 | $1,095 | 9,369 | 187,396 |
| Brazil | ..... | 119,779 | ..... | 131 | ..... | 203 | 120,113 |
| Australia | ..... | ..... | 91,673 | ..... | ..... | ..... | 91,673 |
| Sweden | ..... | 90,330 | ..... | ..... | ..... | ..... | 90,330 |
| Egypt | ..... | 57,757 | ..... | ..... | ..... | ..... | 57,757 |
| Panama | 22,535 | 30,485 | 10 | ..... | ..... | 89 | 53,019 |
| Ecuador | 4,969 | 23,820 | 527 | 4,895 | ..... | 45 | 34,258 |
| Other countries | 1,754 | 3,871 | 25,856 | 620 | ..... | 547 | 32,748 |
| Total | 8,340,730 | 11,171,568 | 86,949,963 | 56,532 | 1,095 | 118,536 | 106,636,013 |

DETAIL OF EXPORTATION, 1910.

| Country of destination. | Animal products. | Vegetable products. | Mineral products. | Wine and liquors. | Cash. | Varias. | Total. |
|---|---|---|---|---|---|---|---|
| Great Britain | $5,163,334 | $3,950,165 | $37,266,567 | $277 | ..... | $6,515 | $46,386,858 |
| United States | 287,755 | 124,628 | 24,264,299 | 88 | ..... | 4,108 | 24,680,878 |
| Germany | 1,783,225 | 807,318 | 20,479,097 | 618 | ..... | 72,649 | 23,142,907 |
| France | 1,171,868 | 59,160 | 3,947,551 | 598 | ..... | 58,109 | 5,237,286 |
| Belgium | 141,317 | 59,259 | 3,236,880 | 88 | ..... | 943 | 3,438,487 |
| Holland | 12,814 | 46,742 | 2,391,287 | ..... | ..... | ..... | 2,450,843 |
| Spain | ..... | 1,406 | 1,987,458 | ..... | ..... | 1,398 | 1,990,262 |
| Cape Colony | ..... | ..... | 1,448,167 | ..... | ..... | ..... | 1,448,167 |
| Bolivia | 67,447 | 859,350 | 1,347 | 19,297 | ..... | 338,573 | 1,286,014 |
| Argentina | 72,935 | 849,401 | 10,291 | 38,644 | ..... | 77,503 | 1,048,774 |
| Peru | 106,866 | 824,568 | 26,028 | 1,456 | ..... | 10,963 | 969,881 |
| Japan | ..... | ..... | 730,215 | 26 | ..... | ..... | 730,241 |
| Poland | ..... | ..... | 538,718 | ..... | ..... | ..... | 538,718 |
| Portugal | ..... | ..... | 510,255 | ..... | ..... | ..... | 510,255 |
| Italy | 795 | 2,204 | 439,404 | 19 | ..... | 986 | 443,408 |
| Canada | ..... | ..... | 343,823 | ..... | ..... | ..... | 343,823 |
| Egypt | ..... | ..... | 258,566 | ..... | ..... | ..... | 258,566 |
| Uruguay | 1,993 | 209,577 | ..... | 2,629 | ..... | 11,710 | 225,909 |
| Brazil | 361 | 203,197 | 10,085 | 66 | ..... | ..... | 213,709 |
| Denmark | ..... | ..... | 125,202 | ..... | ..... | ..... | 125,202 |
| Sweden | ..... | ..... | 86,534 | ..... | ..... | ..... | 86,534 |
| Mexico | ..... | ..... | 85,885 | ..... | ..... | ..... | 85,885 |
| Panama | 3,280 | 42,948 | ..... | 79 | ..... | 214 | 46,521 |
| Other countries | 9,654 | 34,600 | 46,676 | 696 | ..... | 2,157 | 93,783 |
| Total | 8,823,644 | 8,074,523 | 98,234, 35 | 64,581 | ..... | 585,828 | 115,792,811 |

From the foregoing export tables it will be noted that the United States rose from third to second place, during the three years 1908–1910, in the value of exports received from Chile.

The accompanying figures show the declared exports to the United States for this period:

**CHILEAN DECLARED EXPORTS TO THE UNITED STATES.**

| Articles. | 1908 | 1909 | 1910 |
|---|---|---|---|
| Argentiferous pyrites | ..... | $301,050 | $325,906 |
| Beans | ..... | ..... | 53,685 |
| Beeswax | $12,135 | ..... | ..... |
| Chinchilla skins | 35,266 | 64,188 | 209,434 |
| Clover seed | 8,098 | 1,821 | ..... |
| Copper bars | ..... | ..... | 50,170 |
| Copper ores | 2,510,288 | 3,311,939 | 2,716,293 |
| Goatskins | 15,201 | 3,470 | 4,198 |
| Elastic gum | ..... | 6,083 | ..... |
| Gold in copper bars | ..... | 26,839 | 15,163 |
| Gold ores | 5,771 | 2,827 | 1,095 |
| Herbs | ..... | 1,634 | 5,585 |
| Iodine | 255,803 | 718,100 | 893,667 |
| Mules | ..... | 1,021 | 1,718 |
| Nitrate | 14,765,250 | 18,769,236 | 22,866,660 |
| Personal effects | 8,866 | 3,642 | 5,095 |
| Quillay bark | 10,667 | 12,428 | 16,914 |
| Sheep casings | 6,216 | 19,645 | 35,692 |
| Silver | ..... | 19,289 | 15,217 |
| Silver ores | 1,321,259 | 1,167,859 | 1,107,744 |
| Walnuts | 77,048 | ..... | 1,175 |
| Wool | 90,927 | 49,010 | 72,716 |
| Miscellaneous | 4,422 | 5,902 | 3,114 |
| Returned American goods | 15,193 | 15,368 | 28,743 |
| Total | 19,142,238 | 24,501,707 | 28,429,984 |

While most of the other exports amounted to about the same in 1910 as in 1909, the quantity of nitrate received by the United States increased nearly 25 per cent.

## THE NITRATE INDUSTRY FOR 1910.

The production of nitrate during calendar year of 1910 broke the highest record again, and reached the high-water mark of 50,781,331 quintals,[a] against 46,579,656 quintals for the calendar year of 1909. The consumption for the nitrate year ending June 30, 1910, was 51,981,561 quintals, against 40,263,282 quintals for the nitrate year ending June 30, 1909. The increased consumption was largely due to the work of the "nitrate propaganda," backed by a working fund of $601,070, of which the Chilean Government paid $194,640. The following table gives a fair idea of what the "nitrate propaganda" has been able to accomplish during the last eight years and at what cost to the nitrate producers and the Chilean Government:

| Year. | Nitrate producers. | Government appropriation. | World consumption. |
|---|---|---|---|
| | | | *Tons.* |
| 1903 | 160,594 | ..... | 1,429,000 |
| 1904 | 175,194 | ..... | 1,421,000 |
| 1905 | 173,093 | ..... | 1,543,000 |
| 1906 | 172,760 | ..... | 1,639,000 |
| 1907 | 329,462 | $145,995 | 1,647,000 |
| 1908 | 364,987 | 170,327 | 1,733,000 |
| 1909 | 426,782 | 194,660 | 1,922,000 |
| 1910 | 411,218 | 194,660 | 2,251,000 |

It is proposed to expend more for the work of the propaganda during 1911 than was spent during 1910. The United States consumed 12,672,262 quintals during 1910, against 7,988,121 quintals for 1909.

The following table gives the amount, in quintals, of nitrate shipped to the leading countries during 1908, 1909, and 1910:

| Destination. | 1908 | 1909 | 1910 |
|---|---|---|---|
| | *Quintals.* | *Quintals.* | *Quintals.* |
| Belgium | 1,389,374 | 1,787,786 | 2,126,628 |
| British Columbia | 90,200 | 64,240 | 97,822 |
| France | 2,904,967 | 1,838,526 | 1,810,993 |
| Germany | 10,916,232 | 12,471,858 | 10,653,573 |
| Great Britain | 17,503,565 | 15,525,423 | 19,010,443 |
| Holland | 1,840,399 | 1,842,809 | 1,220,576 |
| Italy | 1,102,458 | 1,049,396 | 1,154,569 |
| Japan | 113,374 | 141,350 | 369,600 |
| Sandwich Islands | 239,547 | 318,024 | 425,412 |
| United States | 7,216,484 | 10,113,798 | 12,591,272 |

During the year considerable United States capital was invested in the nitrate fields of northern Chile, and several negotiations are under consideration at present for additional nitrate properties. The outlook for 1911 promises well for American interests in this industry.

The price of nitrate increased during the year 8 cents per quintal, when it reached $1.78 per quintal, while the average price of nitrate for 1909 was about $1.76.

[a] The quintal is equivalent to 220.46 pounds.

The outlook in this industry seems good for 1911, since the exports for the first forty-five days of 1911 exceeded those for the same period of 1910 by 2,507,648 quintals.

### COPPER PRODUCTION IN 1910.

During the year 1910 the production of copper amounted to 17,987 tons, of which 9,271 tons were shipped in the form of copper bars, and the balance as regulas and ores, as per the following table, prepared by the United States Consul at Valparaiso. The totals are given in tons:

| Countries. | Bar copper. | | Regulas. | | Ores. | |
|---|---|---|---|---|---|---|
| | 1910 | 1909 | 1910 | 1909 | 1910 | 1909 |
| | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* |
| England | 130,488 | 142,189 | 21,925 | 17,329 | 451,679 | 498,673 |
| France | 14,772 | 24,288 | ..... | ..... | 105 | 6,615 |
| Germany | 17,529 | ..... | ..... | ..... | ..... | 698 |
| Italy | 1,270 | ..... | ..... | ..... | ..... | ..... |
| United States | 21,359 | 26,441 | 62,484 | 63,952 | 241,875 | 182,070 |

The following table gives the number of quintals of fine copper exported to the respective countries during 1907, 1908, 1909, and 1910:

| Countries. | 1907 | 1908 | 1909 | 1910 |
|---|---|---|---|---|
| | *Quintals.* | *Quintals.* | *Quintals.* | *Quintals.* |
| England | 181,837 | 294,204 | 244,008 | 228,833 |
| France | 10,678 | 31,770 | 25,611 | 14,791 |
| Germany | 1,175 | 699 | 147 | 17,529 |
| Other | 746 | 510 | ..... | 1,270 |
| United States | 76,687 | 62,101 | 93,822 | 95,544 |

NOTE.—The figures quoted in above tables cover the exports of copper from Bolivia and Chile, since all copper exported from Bolivia passes through the Chilean custom houses.

### CUSTOMS REVENUES IN 1910.

The customs revenues of the Republic of Chile in 1910 were 128,315,000 Chilean gold pesos of the value of 18d., or an equivalent of 159,600,000 pesos paper (about $3,192,000). This represents an increase over the amount estimated in the last budget of 3,100,000 pesos. The customs revenues of Chile for the last five years are as follows:

| | Chilean paper. |
|---|---|
| 1906 | $103,965,000 |
| 1907 | 119,978,000 |
| 1908 | 143,158,000 |
| 1909 | 141,435,000 |
| 1910 | 159,600,000 |

This notable increase is due to the growing commerce of the country, and indicates that the commercial side of the Republic continues to develop with the increasing prosperity of the Chilean people.

### TRADE OPPORTUNITIES.

Various consular advices indicate that there is a market in Chile for the following goods: School and office furniture, better grade of shoes, incandescent electric lamps, fire bricks.

### PRODUCTION OF WINE.

The internal-revenue office of Chile gives the area of the vineyards of the Republic as 67,700 hectares and the total number of vines as 275,000,000. The production of wine in 1909 amounted to 168,787,000 liters, that of chicha to 37,650,000, and that of chocoli to 16,500,000 liters.

### BANKS IN THE REPUBLIC.

There are now five foreign branch banks doing business in Chile; of these three are German and two are English institutions.

During the year 1910 the Banco de Chile increased its capital from 30,000,000 to 60,000,000 pesos. The bank rate ranges from 10 per cent to 12 per cent, and there is a demand for all the banks can spare.

The institutions pay from 1 per cent to 6 per cent on deposits—1 per cent on checking accounts and 6 per cent on time deposits for six months or more that require a notice of four months before withdrawal.

### LOAN FOR PAVING VALDIVIA.

The Federal Government has fixed the amount of £50,000 as the loan which the city of Valdivia may contract for the paving of its streets. The loan will be guaranteed by the State, and if made in the Republic may pay up to 6 per cent interest per annum.

### PROPOSED IMPROVEMENT OF THE PORT OF VALPARAISO.

The commission appointed by the Chilean Government to study the question of improving the ports of the Republic has submitted a report to the Department of Finance, accompanied by plans, drawings, and estimates. The works which the commission recommends will cost the State £2,250,000, and when completed will provide protected piers sufficiently adequate to accommodate the entire traffic of the port of Valparaiso, with a separate wharf for the traffic in coal, the cost of which is included in the sum referred to. The plans submitted also provide for the enlargement of the beach, the construction of customs warehouses, the erection of cranes, and the installation of necessary appliances and railway trackage for the expeditious handling of freight. When these improvements are completed and modern equipment introduced for this purpose, the present cost of handling freight per ton will be greatly reduced.

### CITY MARKET AT VALPARAISO.

The municipality of Valparaiso is to construct a modern market in the near future at an estimated cost of $150,000 United States gold. It is to be of reenforced concrete construction, firm and earthquake proof, and equipped with all modern improvements, including cold-storage rooms.

### BORAX INDUSTRY.

A new impetus has been given to the borax industry in the north of Chile as a result of the opening up of the Arica to La Paz railway. The production of the works is estimated at about 5,000 tons per annum.

### PUBLIC EDUCATION.

The Chilean Government gave much attention to educational matters during 1910, with the result that more pupils began school about March 1, 1911 (this being the time the school year begins in Chile), than ever before entered the schools of this country. At the beginning of 1910 there were 2,475 primary schools with 207,739 pupils, and 2,517 teachers and 2,153 assistants. There were 72 high schools with 15,873 pupils and 1,031 teachers. There were 10 normal schools with an attendance of 1,316 and a corps of 35 teachers. The appropriation for the schools of Chile for 1910 amounted to $7,317,885. The Government also supports 10 commercial schools attended by several hundred pupils.

### PROPOSED AVIATION INSTRUCTION FOR THE ARMY.

The city of Santiago, Chile, has recently been favored with aviation exhibits on the BLERIOT monoplane by the distinguished Italian aeronaut, Mr. CATTANEO, who won a prize of 100,000 francs at Buenos Aires by crossing the La Plata River for a distance of 70 kilometers. Officials of the Army have taken special interest in these exhibits, and a proposal has been made to the Chilean Government by the French aeronauts ODIN and BERYERON to instruct Chilean officials in the use of dirigibles and aeroplanes. These gentlemen offer to bring to Chile a ZODIAC dirigible, a FARMAN biplane, and a BLERIOT monoplane for the lump sum of 200,000 francs.

The Chilean Government has appointed a commission, consisting of Lieut. Col. PEDRO MORAN DE VICUÑA and First Sergt. ORTIZ WORMALD, to investigate the best method of preparing a competent personnel of aeronauts in the Chilean Army.

### IRRIGATION PROJECT.

An extensive irrigation project for watering the rich agricultural zone between Peña Blanca and El Salto, Chile, is now under way.

The plan includes the formation of an artificial lake at Quebrado de Escobar, near Peña Blanca, with a storage capacity of 10,000,000 cubic meters of water. This reservoir, from which the entire district can be advantageously irrigated, will be 80 meters wide and 25 meters deep. This will give a fall of 100 meters, which can be utilized in developing electric energy for motive power, electric lighting, and for conveying water to the villages and farms in the district. The project is estimated to cost about 200,000 pesos ($73,000).

The towns that will be especially benefited by this irrigation plant are Peña Blanca, Villa Alemana, Quilpue, and the new villages and settlements that are forming at Las Palmas.

### EARNINGS OF SOUTH AMERICAN STEAMSHIP CO.

The earnings of the South American Steamship Co., the headquarters of which are in Valparaiso, Chile, were 216,000 pesos gold ($73,000) for the last half of 1910. The total capital of this company is 8,050,000 pesos gold ($2,938,250).

### TELEPHONE CONCESSION.

The Government of Chile has authorized Alfonso de la Fuente, Augusto A. de Aguirre, and Gustavo Lange to establish a telephone line in Iquique and to extend branches of the same to such parts of the Province of Tarapaca as may be deemed advisable.

### CONSTRUCTION OF RAILROAD FROM LEBU TO SAUCES.

Construction work has just commenced on the railroad from Lebu on the Pacific, about 300 miles south of Valparaiso, to connect with Sauces, a station on the railway from Santiago to Traiguen. The road is to be 101 miles long with a 5-foot 6-inch gauge. It is to be built and operated by the Chilean Eastern Central Railway Co. (Ltd.), with a 5 per cent guaranty on the part of the Chilean Government on the actual cost of the road to secure the interest on the bonds to be issued.

### NEW RAILWAY TO ARGENTINA.

The Government of Chile has granted a concession for the construction of a steam railway from the station of Curacautin, or Poncoche, on the line of the State Railways, to the boundary of the Argentine Republic. The proposed railway will have an approximate length of 120 kilometers, and construction is to commence within a period of six months from the date of the approval of the plans by the Federal Government. The plans are to be submitted within a term of two years and the construction terminated within four years.

### PROPOSED RAILWAY FROM CABILDO TO COPIABO.

A French company has been organized with a capital of 25,000,000 francs ($5,000,000) to build a railway from Cabildo to Copiabo, Chile.

### LONGITUDINAL RAILWAY.

In January last work was commenced on the second section of the Longitudinal Railway, comprised between Oficina Granja, in the Province of Tarapaca, and Pueblo Hundido, in the Province of Chañaral. The section referred to has a length of 715 kilometers, and the contract cost of construction is £2,240,000.

### RAILROAD NOTES.

The railway from Osorno to Puerto Montt is expected to be open to traffic in June next.

Mr. JUAN S. NAYLOR has been authorized to build an electric railway from Monte Alegre elevator, in the Valparaiso hills, to Cerro de Las Monjas.

In January last work was commenced on the electric line from Antofagasta to Mejillones. The railway will run along the coast for a distance of 90 kilometers.

The construction of the railway from Choapa to Salamanca was completed on December 19, 1910.

The railway from Volcan to Maipu, which starts from Puerto Alto, the terminal point of the Pirque Railway, has been opened to traffic.

The section of the railway from Alcones to Pichilemo, comprised between Alcones and El Lingue, has been delivered to the State Railways for exploitation.

The Choapa to Monte Osario Railway was opened to traffic on January 5 last.

The Department of Industry and Public Works has approved the definite project of the Cajon to Llaima Railway, covering a distance of 48,140 meters.

### CONSTRUCTION OF STATE RAILWAYS, 1910–11.

The construction of State Railways in Chile in 1910 was as follows: The railway from Inca to Chulo, 82 kilometers long, was completed at the beginning of March. The section from the Puente Alto to Canelo, of the San Bernardo to Volcan Railway, was finished on February 15. The provisional acceptance of the railway from Alcones to Arbol was made on March 15. Active work was continued on both sections of the railway from Arica to La Paz.

At the beginning of 1911 the following railways were being actively constructed: Paloma to San Marcos, 41.6 kilometers; Choapa to Salamanca, 29.2 kilometers; Longitudinal Railway, whose construction up to November last was carried on by the Government, was turned over for termination to the Howard Construction Co., whose bids were approved by the Government; the lines from Rayado to Los Vilos, 126 kilometers; San Bernardo to Volcan, 75 kilometers; Melpilla to San Antonio, 52 kilometers; Alcones to Pichilemu; Curico to Hualane; Chillan to Las Termas; Osorno to Puerto Montt; Ancud to Castro; Saboya to Capitan Pastene, and Pua to Curacautin, were also under construction.

Surveys have been made of the following railways: From Valparaiso to Casablanca, 50 kilometers; Melipilla to Las Cabras; Paine to Talagante; Cauquenes to Chanco and Curanipe, Coelmu, and Quirigue; Pinto to Chillan; Coelmu to Penco; Yumbel to Rio Claro; Cajon to Llaima; Freire to Cunco; Union to Rio Bueno; Bulnes to San Ignacio; San Carlos to San Fabian; Artificio to Chincolco; Pintados to Collahuasi, and San Clemente to Molina.

On June 3, 1910, the construction of the railway from San Felipe to Putaendo, and Rancagua to Donihue was contracted for.

The following bridges have been erected: Maule, Cholchol, and Ranquilco.

The section of the Melipilla to San Antonio Railway, extending as far as Llolleo, was opened to traffic in October, and on December 4 the railway from Rayado to Papudo was inaugurated. During the year the railway from Alcones to Lingue was turned over to the Government.

### TRANSANDINE RAILWAY TARIFF.

The Government of Chile has extended the tariffs of the Chilean Transandine Railway, now in force, until November 18 of the present year, with the exception of the tariff on stock to which an additional charge of 50 per cent will be added. The railway is required to submit to the Government a lower tariff than that now operative, provided it can obtain a proportional reduction from the Argentine Transandine Railway. The tariff now in use dates from November 18, 1907, and the rates can not be reduced without the approval of the Chilean Government.

### INCREASE IN RAILWAY RATES.

The Director General of the Chilean Railways has issued a decree increasing the tariff 10 per cent, both for passengers and freight, to take effect August 1, 1911. This it is hoped will bring the receipts and expenses much nearer together.

### COMPARISON OF RAILWAY TARIFFS.

The following tables are of interest as given by the management of the Chilean railways as a comparison of the rates charged for passengers per 100 kilometers, or 62 miles:

| Countries. | First class. | Second class. | Third class. |
|---|---|---|---|
| Argentina | $1.75 | $1.31 | ..... |
| Austria | 1.85 | 1.30 | $0.72 |
| Belgium | 1.82 | 1.23 | .73 |
| Chile | 1.00 | .75 | .26 |
| England | 2.51 | 2.12 | 1.26 |
| France | 2.16 | 1.47 | .96 |
| Germany | 1.88 | 1.13 | .75 |
| Holland | 1.61 | 1.28 | .80 |
| Italy | 2.12 | 1.57 | 1.14 |
| Russia | 1.74 | 1.04 | .75 |
| Switzerland | 2.01 | 1.40 | 1.00 |

The following is given as the cheapest rate per ton for 100 kilometers, or 62 miles, in the different countries mentioned:

| Countries. | Rate. | Countries. | Rate. |
|---|---|---|---|
| Argentina | $1.05 | Germany | $0.61 |
| Austria | .86 | Holland | .80 |
| Chile | .44 | Russia | .62 |
| France | .93 | Switzerland | 1.10 |

## COLOMBIA

### MINERAL WEALTH OF THE REPUBLIC.

Sr. Toribio Díaz Guiñazú, Chargé d'Affaires of Argentina in Bogota, has recently submitted to his Government a comprehensive and interesting report on the immense mineral wealth of Colombia, from which the following extracts are taken:

It would be quite impossible, says Señor Guiñazú, to estimate, even approximately, the enormous mineral resources of Colombia, which are as yet practically unexploited. There are gold, silver, platinum, and iron mines, coal and sulphur deposits, oil fields, and precious emerald, ruby, amethyst, and diamond mines. The emerald mines of Colombia, which the Chargé d'Affaires describes in detail, are now supplying the markets of the world.

For the consideration of its minerals, Colombia may be divided into two great zones: The Central-Andean and the West-Andean. The former comprises the mining lands of Tolima, most of which have never been explored, and the Antioquia Territory, which has been known and exploited for many years.

It is estimated that the gold mines have produced, from the second half of the sixteenth century until 1886, the stupendous sum of

$250,000,000. In 1908 the exports of gold from those mines alone amounted to $2,170,000.

In the production of platinum Russia is the only country that surpasses Colombia. Most of the platinum mines of the Republic are in the Choco region, where a platinum nugget weighing several pounds has recently been found.

The report then deals with the mining taxes, governed by the law of 1909, which is very liberal in its provisions regulating the discovery, acquisition, and exploitation of mines.

Speaking of the Colombian emeralds, the report states that the largest and most beautiful emerald in existence came from that country, and is now in the collection of the DUKE OF DEVONSHIRE. It is a perfectly hexagonal crystal, 2 inches long and weighing 300 grams. The emerald-bearing rocks of Colombia consist principally of bluish-black slate formation, stratified in thin layers. The Colombian gems are notedly flawless and exhibit to the highest degree the qualities of color, brilliance, and size characteristic of the best emeralds. The most important emerald mine is that of Muzo, which covers an area of 140,000 acres, of which only 50 have been exploited during the last twenty-five years. The exploitation is now under Government control.

### RAILROAD DEVELOPMENT IN MEDELLIN.

A recent communication received by the Pan American Union from SILAS H. WRIGHT, United States Consular Agent at Medellin, Colombia, would seem to indicate that there are opportunities in his district for the judicious investment of foreign capital. The Department Assembly, now in session at Medellin, has just authorized the Governor of the Department of Antioquia to negotiate a foreign loan not exceeding $3,500,000. This money is to be utilized in the completion of the Antioquia Railroad from the Magdalena River to Medellin, about 200 kilometers. This railroad, half of which is already completed, has thus far been built and operated by the Department of Antioquia alone, receiving from the National Government a bonus for every kilometer placed in operation. It is a paying railroad to-day, and that it will pay much better after completion is the opinion of expert officials.

## COSTA RICA

### CENTRAL AMERICAN PARCELS-POST CONVENTION.

The Government of Costa Rica has ratified the convention for the exchange of parcels post, entered into with the other Republics of Central America, at the city of Guatemala, on January 17, 1911.

### STATION OF PLANT PATHOLOGY.

The President of Costa Rica has authorized the establishment in San Jose of a station of plant pathology, under the direction of the Technical Bureau of Agricultural Experiments. The station will contain a garden for the work of plant and fruit-tree propagation and improvement; it will study plant life in all its relations to agriculture; investigate the diseases of plants raised in the country, and carry on field tests and demonstrations of their control and prevention; it will answer all inquiries on matters of agriculture, and publish the results of its experiments in the bulletins of the department.

## CUBA

### GOVERNMENT RECEIPTS, 1910.

The revenues of the Cuban Government, from all sources, during the year 1910 amounted to $32,595,552.17. Of this total, $24,826,012 were for customs receipts, the Port of Habana alone collecting $17,185,322.86.

### "MEDAL OF THE INDEPENDENCE."

As a fitting tribute and reward to those who participated in the war of independence, President GOMEZ has ordered that there be struck a medal, to be known as the "Medal of the Independence," and distributed to all veterans. The generals and chiefs will receive gold medals, the officers silver, and the privates bronze.

### INAUGURATION OF MILITARY ACADEMY.

The Preparatory Academy for officers of the Cuban Army, established at Morro Castle, was formally dedicated on March 5, 1911. A fitting program had been arranged, and the exercises were attended by President GOMEZ and a large gathering representing the official and social life of the Republic. In his address President GOMEZ expressed his desire to have the Cuban Army equal the best armies in the world in point of training and efficiency.

### FOREIGN TRADE IN 1910.

Figures recently made public by the Cuban Department of Finance concerning the foreign commerce of the Republic in 1910 show a balance of trade in favor of the Republic of $47,166,410, as against

$33,263,458 in 1909. The foreign trade of Cuba in 1910 was as follows, compared with the preceding year:

| | 1909 | 1910 |
|---|---|---|
| Imports | $91,447,581 | $103,657,497 |
| Exports | 124,711,059 | 150,823,907 |
| Total | 216,158,640 | 254,481,404 |

The imports, by countries of origin, were as follows:

| Countries. | 1909 | 1910 |
|---|---|---|
| United States | $46,339,198 | $54,554,707 |
| England | 12,260,414 | 12,292,219 |
| Spain | 8,019,893 | 8,680,058 |
| Germany | 6,587,538 | 6,539,560 |
| France | 5,303,618 | 5,514,939 |
| Other American countries | 7,127,028 | 8,319,929 |
| Other European countries | 3,892,876 | 5,532,357 |
| All other countries | 1,917,016 | 2,223,728 |
| Total | 91,447,581 | 103,657,497 |

The exports were sent to the following countries:

| Countries. | 1909 | 1910 |
|---|---|---|
| United States | $109,407,613 | $129,328,507 |
| England | 5,013,676 | 10,696,289 |
| Germany | 4,053,960 | 3,646,398 |
| France | 1,216,275 | 1,549,080 |
| Spain | 865,519 | 727,297 |
| Other American countries | 2,660,971 | 3,391,216 |
| Other European countries | 1,081,241 | 915,175 |
| All other countries | 411,814 | 569,945 |
| Total | 124,711,069 | 150,823,907 |

## EXPORTS OF SUGAR IN 1910.

An interesting fact revealed by the statistics of the foreign trade of Cuba for 1910 is that sugar cane and its products comprised 70.28 per cent of the total exports. The exports of sugar during that year were valued at $101,500,000, or an increase of $28,368,446 over the sugar exports of the preceding year. The United States is the heaviest consumer of Cuba's sugar, her share of the sugar exported being $93,051,343.

## ELECTRIC PLANTS.

Mr. Antonio Ramos has secured from the Cuban Government authorization to build and operate electric plants in the municipality of Placetas and in Camaguani. It is specially provided that the machinery, wire, and all other materials shall be in conformity with the provisions of the National Board of Fire Underwriters of the United States.

### IRRIGATION PROJECT.

The Secretary of Agriculture, Commerce and Labor, of Cuba, is actively engaged in carrying out the preliminary arrangements for irrigation on the island. To this end he has asked the Foreign Office to request the United States and British Governments to each recommend an engineer whose services could be secured by the Cuban Government. These two irrigation experts, together with a Cuban engineer, will constitute a commission which will study the subject in general, and make a detailed investigation of the possibilities of irrigating the Province of Pinar del Rio.

### GRAPHITE MINES IN THE ISLE OF PINES.

A company has recently been organized in the Isle of Pines, Cuba, for the exploitation of the graphite mines, discovered five months ago in the Canada Mountains. It is estimated that the deposits contain over 1,000,000 tons of graphite ore yielding 85 per cent of the pure mineral.

## DOMINICAN REPUBLIC

### MESSAGE OF THE PRESIDENT.

President CACERES states, in the message which he addressed to the National Congress on February 27 last, that the relations of the Dominican Republic with friendly Powers have been maintained on a plane of equality and amity, with the exception of the difference which arose with the Republic of Haiti in November, 1910. After discussing in detail the origin of said difficulty, the President remarks that the commission appointed by both Governments had to terminate its negotiations because of a disagreement, and says:

> At this stage of affairs the Government of Haiti requested that we should retire the forces that we maintained on the Pedernales boundary line and submit to arbitral decision the general question of our frontier limits. With that object in view and upon request of the Haitian Government, the Government of the United States of North America hastened to offer us its good offices in its fervent desire for the preservation of peace, and in order that, at the same time, a just and honorable settlement of the present controversy between the two Republics could be arrived at.

The message states that there have been a large number of awards made to the Government in the various expositions held during the last 10 years. Furthermore, at the exposition of Brussels, which was inaugurated in 1910, the Dominican section was so meritorious and the premiums awarded to its exhibitors were so numerous that it is now safe to predict that when agriculture in the Dominican Republic

is carried on in accordance with modern scientific methods the products can favorably compete with those of other countries.

Public instruction and agriculture have made notable progress. As to public works, during the course of the past year studies, plans, and estimates have been made of various important public improvements. The first three sections of the highway known as the Carretera del Oeste were completed to the eastern bank of the Jaina River. The port works of Santo Domingo are much advanced, and the iron and cement breakwater on the eastern shore of the Ozama has already been provisionally accepted by the Government.

The President is negotiating with the Samana and Santiago Railway Co. for the construction of a railway from the capital of the Republic to the northern part of the country, a very important undertaking and one which will offer a powerful stimulus to the agricultural progress of the regions penetrated.

President CACERES asks Congress to amend and correct some deficiencies in the mining and postal money-order laws in order that better service may be rendered the public in those important branches of the public business.

## PUERTO PLATA FINANCES FOR 1910.

The following table showing the revenues and expenditures of the municipality of Puerto Plata has been received from PHILIP E HOLLAND, the United States Consul at that post:

*Receipts.*

| | |
|---|---|
| Abattoir, rent of | $1,920.00 |
| Beef stalls, rent of | 3,125.00 |
| Market stalls, rent of | 5,040.00 |
| Cockpit and public entertainments for speculation purposes | 615.00 |
| Licenses | 4,994.07 |
| Lighting | 1,217.70 |
| Surtax on importations | 7,020.79 |
| Municipal tonnage tax | 75.80 |
| Steamship entries | 930.00 |
| Civil and judicial register | 1,968.99 |
| Police fines | 339.00 |
| Permits, boats and carts, etc | 536.00 |
| Tax on raffles | 20.73 |
| Burial permits | 212.00 |
| Municipal alcohol | 3,099.93 |
| Tax on local lotteries | 5,850.00 |
| Tax on lotteries of other communes | 1,000.00 |
| Rent, municipal lots (land) | 965.38 |
| Sale of niches and cemetery land | 363.00 |
| Dog licenses | 7.00 |
| Municipal tax | 13,890.98 |
| Other taxes | 878.59 |
| Total | 54,159.96 |

*Disbursements.*

| | |
|---|---|
| Administration and receivership | $3,606.39 |
| Public instruction | 15,964.89 |
| Academy of Music | 1,888.80 |
| Public Library | 180.00 |
| Police | 5,039.43 |
| Health department | 3,724.58 |
| Streets and roads | 7,343.00 |
| Public lighting | 4,380.00 |
| Graveyards | 650.45 |
| Charity | 2,632.00 |
| Parks | 540.00 |
| Public clock | 120.00 |
| Public services | 660.00 |
| Printing | 225.25 |
| License commission | 249.72 |
| Professional services | 300.00 |
| Repairs, public buildings | 400.00 |
| Balance due on property | 500.00 |
| 1909 claims | 955.59 |
| Miscellaneous: Works, furniture, celebration patriotic days | 281.14 |
| Incidentals | 1,247.07 |
| Cash on hand for 1911 | 5,271.65 |
| Total | 54,159.96 |

It is interesting to note from these figures that nearly 60 per cent of the total receipts are derived from municipal and lottery taxes and from rentals of the market and abattoir. Of the expenditures, about 30 per cent is devoted to education and charity and 40 per cent to police protection, sanitation, and street improvements.

## STREET BUILDING AT PUERTO PLATA.

During the year 1910, 8,666 square yards of new streets were constructed in Puerto Plata. Since 1906 the City Council has annually set aside a certain percentage of the municipal revenues for street building.

## METEOROLOGICAL OBSERVATIONS.

The following observations have been recorded during the years 1908, 1909, and 1910 at Puerto Plata:

| | 1908 | 1909 | 1910 |
|---|---|---|---|
| Barometer readings: | | | |
| Highest | 30.37 | 30.55 | 30.64 |
| Lowest | 29.82 | 29.90 | 30.07 |
| Daily average | 30.15 | 30.28 | 30.36 |
| Thermometer readings: | | | |
| Highest, degrees F. | 92.00 | 95.00 | 95.00 |
| Lowest, do. | 66.00 | 65.00 | 62.00 |
| Daily average, do. | 79.93 | 79.76 | 79.43 |

| | 1908 | 1909 | 1910 |
|---|---|---|---|
| Hygrometer readings: | | | |
| Highest.....degrees F.. | 100.00 | 100.00 | 92.00 |
| Lowest.....do.... | 51.00 | 42.00 | 43.00 |
| Daily average.....do.... | 80.41 | 68.06 | 68.99 |
| Rainfall: | | | |
| January.....inches.. | 6.80 | 9.92 | 14.41 |
| February.....do.... | 10.22 | 4.37 | 3.26 |
| March.....do.... | 4.73 | 1.25 | 5.13 |
| April.....do.... | 2.25 | 1.00 | 2.06 |
| May.....do.... | 2.11 | 4.15 | .10 |
| June.....do.... | .70 | 3.00 | .93 |
| July.....do.... | 6.35 | 2.24 | 3.48 |
| August.....do.... | 2.46 | 7.37 | 7.51 |
| September.....do.... | 10.66 | 12.10 | 5.07 |
| October.....do.... | 3.33 | 10.03 | 6.43 |
| November.....do.... | 7.19 | 34.43 | 8.24 |
| December.....do.... | 8.92 | 5.56 | 33.74 |
| Total.....do.... | 65.72 | 95.42 | 90.36 |
| Monthly average.....do.... | 5.48 | 7.95 | 7.53 |

# ECUADOR

## PLACE OF RATIFICATION OF ARBITRATION TREATY WITH BRAZIL.

The Resident Minister of Brazil in Quito has advised the Ecuadorean Government that it will be agreeable to his country that the exchange of ratifications of the Ecuadorean-Brazilian arbitration treaty, signed in Washington on May 13, 1909, take place in the city of Quito, capital of the Republic of Ecuador.

## CONSULATE GENERAL AT IQUIQUE.

By order of a presidential decree, the General of Ecuador at Iquique, Chile, had been made Consul General at that important port, and the consular office raised to the rank of a general consulate.

## BUDGET FOR 1911.

Gen. Eloy Alfaro, President of the Republic, declared in a recent executive decree that the section of the budget of 1909 pertaining to the expenses of the Federal Government shall obtain for the year 1911.

## MUNICIPAL TAXES FOR SANITATION.

For the purpose of procuring funds for sanitary works and improving general hygienic conditions, the municipal board of Quito is now taking advantage of the federal law of November 3, 1908, decreed on January 27, 1911, under which the following taxes are levied:

Four centavos (2 cents) a kilo on wine, beer, and foreign fermented beverages; 3 centavos (1½ cents) a kilo on domestic alcohols

and fermented beverages, with the exception of mallorcas, manufactured in any other canton than that of Quito; 1 centavo (½ cent) a kilo on foreign gaseous waters; 30 centavos (15 cents) a kilo on domestic cigars and cigarettes, plus a surcharge of 50 per cent on foreign cigars and cigarettes; 20 centavos (10 cents) per 100 kilos on foreign commodities, with the exception of liquors, and the same amount on each load of foreign commodities if brought into the capital on pack animals, and 5 centavos (2½ cents) for every 46 kilos or fraction thereof of groceries sold by weight.

A tax of 8 centavos (4 cents) per liter is also imposed on aguardiente manufactured in the city of Quito, and 2 centavos (1 cent) per liter on all aguardiente brought into the canton for sale or consumption; 2 centavos (1 cent) per liter on mallorca manufactured in the canton, and 4 centavos (2 cents) per liter on mallorca brought in from other places; 20 sucres ($10) on special hearses; 15 sucres ($7.50) on first-class hearses; and 10 sucres ($5) on second-class hearses.

## MILITARY INSTRUCTOR.

The Minister of War and Marine of the Republic of Ecuador has arranged, with Col. Manuel Martínez, an expert military instructor of Colombia, to give military instruction in some branches of the Army of the Republic. A similar engagement has been made with Lieut. Luis Arenas, a Chilean citizen, for rendering like services.

## AVIATION SCHOLARSHIPS.

The Guayas Shooting and Aviation Club, which holds regular meetings at Guayaquil, Ecuador, counts among its members many of the most intelligent, influential, and progressive citizens of the country. At a recent enthusiastic meeting of this club Gen. Eloy Alfaro, President of the Republic, was petitioned to send four young men abroad, at the expense of the Federal Government, for the purpose of acquiring practical and technical instruction in the international aviation school at Paris. Acting upon this suggestion and upon the recommendation of the Superior Council of Guayaquil, the Chief Executive has designated two distinguished young gentlemen, Luis Troya and Manuel Maria Bucheli, who have manifested special interest in aerial navigation and who are fitted for a profitable and exhaustive study of aeronautics in all its branches. Two other young men who have ranked high in their studies at the Military College of Ecuador will also be selected by the President to attend the aviation school at Paris.

On the return of these four students provision will doubtless be made to utilize their services in teaching this useful and fascinating science at home and in training cadets and officers for aeronautical service in the Army of the Republic.

### CIVIL ENGINEERING SCHOLARSHIP.

Arrangements have been made by the Department of Education whereby the Ecuadorean student, Carlos Guillermo Lopez, who has been in the city of New York for some time past, will study civil engineering in the United States. The expenses will be borne by the Federal Government of Ecuador.

### MUNICIPAL HAT FACTORY AT GUAYAQUIL.

A hat factory has been established in the city of Guayaquil by the municipality, under the direction of Prof. Darío Celleri Montero and his wife. Machinery and equipment have been installed for the manufacture of hats from the celebrated toquilla straw used in the so-called Panama hats. This straw is very abundant at certain places along the coast of Ecuador, and especially in the Province of Manabi. Although Montecristi and Jipijapa, in Ecuador, are especially noted for their toquilla straw hats, nevertheless Guayaquil is the important center for their sale and distribution. Artisans skilled in the weaving of these hats can be obtained in Guayaquil in considerable numbers, so that the factory will have available at once an abundant supply of efficient labor.

### MUNICIPAL LIGHTING PLANT AT AMBATO.

The city of Ambato has taken preliminary measures for the establishment of a municipal electric-light plant, and bids have already been requested for installing it. This progressive city is the only one in the interior of the Republic which has municipal waterworks. At present there is a strong sentiment among the residents of Ambato in favor of a first-class municipal electric-light plant, and the officers of the corporation are energetically working for the consummation of this most desirable and commendable undertaking.

### BANK OF PICHINCHA AT QUITO.

Although in existence but a comparatively short time, the Bank of Pichincha at Quito has become one of the most important institutions in the northern provinces of Ecuador and has been closely connected with the development of the interior. The bank was organized in 1906 with a capital of 600,000 sucres ($300,000), but during 1910 the capitalization was increased to 1,000,000 sucres. The capital stock of the bank is divided into 10,000 shares, with a par value of 100 sucres each, and during the year 1910 paid a dividend of about 25 per cent.

### TRAIN SERVICE TO CALCETA.

Train service has been established on the Bahia to Quito Railway, between the port of Bahia de Caraquez and the station of Calceta, with intermediate stops at Avispero, Tambo, Tosagua, and Estancilla. Trains leave Bahia at 7 a. m. and reach Calceta at 11 a. m., returning on the same day at 1.30 p. m. and arriving at Bahia at 5 o'clock p. m.

### EXTENSION OF TRAMWAY LINE IN GUAYAQUIL.

The municipality of Guayaquil has granted permission to the street railway company of that city to extend its line from the dockyard through Artesanos to Quito Street, and thence to Aguirre Street. This places into easy access with Guayaquil a growing suburb of that city.

### IMPROVEMENT ON MACHALA TO PUERTO BOLIVAR RAILWAY.

The Federal Government has recently spent 100,000 sucres ($50,000) for repairs on the roadbed of the Machala to Puerto Bolivar Railway. This short line is in the southern part of Ecuador and is of particular importance, as it affords a safe and quick outlet to the Pacific Ocean for the products of the fertile country through which it passes.

### MANTA TO SANTA ANA RAILWAY.

Pablo Gonzenbach, constructing engineer of the railway from Manta to Santa Ana, Province of Manabi, has recently been granted the franking privilege over the Government telegraph lines of Ecuador. It is the desire of the Government to assist and expedite in every way possible the work of construction on this railway, inasmuch as the section of country which it traverses will benefit by railway communication with a Pacific coast port. The extension and completion of the line will doubtless mean increased prosperity to the inhabitants of the zones through which it will pass and insure a more rapid exploitation and development of the immense natural resources of this productive region of the Republic.

## GUATEMALA

### MESSAGE OF PRESIDENT ESTRADA CABRERA.

The Pan American Union has just received a copy of the annual message which President Manuel Estrada Cabrera of Guatemala presented to the National Legislative Assembly on March 1, 1911. We give below the salient features of this important document, an exponent of the flourishing state of the Republic and the progress achieved during the period of 1910.

With reference to the cordial relations maintained with the nations of the world, the President says:

> The relations of the Republic with the powerful American Union have been maintained upon a basis of the most perfect harmony, and it is gratifying for me to report that to accomplish this the American Legation accredited before my Government and the Guatemalan Legation in Washington have contributed in an efficient manner. With the other nations the relations have continued on friendly and cordial terms, and the Government has expressed its sympathy whenever an important event has filled a country with joy or sunk it in sorrow.

Speaking of the satisfactory health conditions now prevailing in the country, President ESTRADA CABRERA quotes as a proof of his assertion that during the year the number of births was 74,498, as against 35,077 deaths, making a net increase of 39,421 in the population.

The registration of deeds in 1910 reached a total which shows an increased activity in the real estate transactions of the Republic. The total value of the realty transfers amounted to $10,169,300.70 gold, distributed as follows: Real estate transfers, $1,884,392.10; mortgages on real estate, $4,319,529.30; mortgages canceled, $3,965,379.30.

The gross fiscal revenues were ₱51,571,440.69, as compared with ₱49,239,722.93 in 1909, or an increase of ₱2,331,717.76.

The disbursements for 1910 aggregated ₱45,959,410.07, of which ₱17,358,293.67 were expended in the administration of the Government and ₱28,601,116.40 for the service of the public debt.

The president states that the development of agriculture has been constantly before his attention, and asserts that his efforts have not been in vain, as the results thus far obtained are most gratifying.

The postal service has also been attended to and improved. The total number of postal pieces circulated during the period was 9,069,705, and the revenues exceeded those of 1909 in ₱266,769.96. The national telegraph and telephone lines were likewise improved and extended to meet the increasing demands of the service.

Concerning the railroads, the message says:

> It is with gratification that I inform you that on November 2 last the work of construction was inaugurated on the Guatemalan section of the Pan American Railroad, which, as the concessionares affirm, will be completed toward the latter part of 1912. So evident is the importance of this work that it is unnecessary for me to dwell upon it. Also, on the same date, the construction of the line that will connect Quezaltenango with the Central Railroad was started, and upon its completion that city will be in direct communication with the northern zone, with the Atlantic, and with the Pan American Railway. The railroad traffic during the year had a considerable increase, which is a convincing proof that commerce and agriculture are constantly progressing.

In regard to public instruction, the message shows that this important branch of the Government has continued, as in former years, to receive the closest attention of President CABRERA. In the 1,670 primary and secondary schools the attendance during the year was over 54,000, with the following increases over the preceding year: schools, 254; pupils registered, 7,019; pupils examined, 8,382.

## TRADE HINTS.

According to reports from GEORGE A. BUCKLIN, Jr., the United States Consul General at Guatemala City, there is considerable activity in construction and building in his district. This should afford an opportunity for business in cements and various kinds of building materials.

# HAITI

### OPENING OF NEW NATIONAL BANK OF HAITI.

An event of national importance to the Republic of Haiti took place at Port-au-Prince, the capital, on March 8, when the new Bank of the Republic of Haiti was formally inaugurated. There were present at the exercises Gen. ANTOINE F. C. SIMON, President of the Republic, the members of the Cabinet, House, and Senate, and a large gathering of other distinguished officials.

The bank opened its doors for the transaction of business on March 2, but as the President was unable to be present at that time the formal official opening was postponed until March 8. The building was artistically decorated for the occasion, the French, German, and American flags forming a conspicuous feature in the scheme of decoration.

President SIMON was received by Mr. C. CAMPAGNE, the acting director of the bank, who delivered an address setting forth the program and purposes of the institution. Other speeches were made by Mr. MURAT CLAUDE, the Secretary of Finance, and Mr. RÉMUSAT PIERRE, Special Bank Commissioner for the Government of Haiti.

# HONDURAS

### INAUGURATION OF PRESIDENT BERTRAND.

The National Congress of Honduras, having accepted the resignation tendered by Gen. MIGUEL R. DÁVILA as President of the Republic, Dr. FRANCISCO BERTRAND was designated to fill the unexpired constitutional term, in the capacity of Provisional President. The inauguration of Dr. BERTRAND took place on March 28, 1911, with imposing ceremonies, on which occasion Gen. DAVILA delivered the following address:

Mr. PROVISIONAL PRESIDENT: For the first time in the history of Honduras a settlement by arbitration has been given to a civil war that threatened to be a cruel and protracted struggle. The Government that I represent, foreseeing the serious results which a continuance of the war would have meant to the Republic, directed its efforts to preventing bloodshed. Under the country's present circumstances, I believe that it is neither human nor patriotic to sacrifice innocent lives in fratricidal strifes.

Mr. President, this is not the opportunity of even alluding to the work done by my Government. There will be occasion later on to have it recorded with more delibera-

tion, when it may be necessary to establish the truth of events. In these moments of conciliation, all partisan feelings should be erased, and the national sentiment should animate the hearts of all. We are all Hondureans, and our internal dissensions have annihilated, during the lapse of many years, the national energies. As citizens of the same country, it is our imperative duty to work for its regeneration.

The conferences of Puerto Cortés have ushered in a new era of peace and concord. It is thus that I now deliver the Presidency of the Republic, not to the armed victor, but to the friend of the Hondureans, to the citizen who will insure the political stability. And the chief executive and his cooperators will not abandon the country, as the vanquished, seeking safety beyond the frontiers. We are all, whether in private or public life, under obligation to help toward strengthening social tranquillity.

The Legislative Congress puts you in possession of the Chief Magistracy of the State. That is to say, an expression of the national will places in your hands the destinies of the country. We have confidence in you, because you represent the interests and the common aspirations of the Hondurean nation. As all other things, patriotism has its own aspects and moments. On some occasion, it may require the sacrifice of blood; on others, the pacific self-devotion of men. Honduras needs peace by all means, it being the only condition that will satisfactorily solve its future.

A new period has begun for Honduras. The blood of brothers will never be shed again, and work will be our best domestic struggle. It behooves you, Mr. President, to initiate this new era; and if, as I believe, all the citizens will cheerfully render their assistance to efface political hatred and strengthen peace, your task will be less difficult and your efforts, crowned by good success, will win the eternal gratitude of the people.

The Provisional President, Dr. BERTRAND, responded with these remarks:

SIR: It is true that for the first time in our history a civil war has been ended by a peace conference. The voice of patriotism has overpowered everything; and we Hondureans continue to-day pursuing our pacific labors, thus showing that, though small in territory, the great ideals of humanity find an ever wide field in our hearts.

As to your administration, this is not, indeed, the proper time to judge it; but you may have faith in the impartial history, whose function it is to purify facts and to give the persons who have had participation therein the place that they deserve. That history will undoubtedly record among the most notable events of your administration the fact that you have been the initiator of peace.

It is gratifying for me to state before my compatriots, that I receive the presidency of the Republic from the hands of the august national representation; and that, therefore, among the Hondureans, there are not to-day victors nor vanquished ones. Consequently, I have reason to hope that my countrymen will assist me efficiently in strengthening public tranquility, and that the work of my administration will be, as I wish, beneficial to the nation.

I realize that the present condition of the Republic is a difficult one; but the mission with which I am intrusted being one of peace and concord, as a citizen I can not decline it. I am ready to make any sacrifice for the honest fulfillment of the obligations which now bind me to the people.

Honorable representatives, you, who have won the gratitude of the people for your services in past emergencies, will convey to your constituents my promise to work unceasingly for the real national interests; and I beg you to tell them that my administration will use all its energies and resources toward the advancement of our beloved country.

Gentlemen, now that the civil war is ended, let our lips utter one single cry: "Long live the Republic."

### EXPORTS FROM TEGUCIGALPA TO UNITED STATES, 1910.

ARMINIUS T. HAEBERLE, the United States Consul at Tegucigalpa, submits the following figures of the declared exports to the United States for 1909 and 1910, representing an increase of over 40 per cent:

*Declared exports to the United States.*

| Articles. | 1910 | 1909 | Articles. | 1910 | 1909 |
|---|---|---|---|---|---|
| Bullion, gold | $30,896 | $70,276 | Precipitates | $627,504 | ..... |
| Bullion, silver | 4,402 | 3,996 | Rubber, india | 2,233 | $2,303 |
| Concentrates | 6,440 | ..... | Sarsaparilla | 33,489 | ..... |
| Coffee, cleaned | 2,031 | ..... | Skins | 13,459 | 9,121 |
| Cyanide products | 199,788 | 576,150 | All other articles | 1,319 | 3,009 |
| Coined silver | 7,215 | ..... | | | |
| Hides, poisoned | 8,384 | 4,354 | Total | 937,160 | 669,209 |

# MEXICO

### CONSULAR TRADE REPORTS OF MEXICO.

The Government of Mexico has decided to publish a Monthly Bulletin of Consular Trade Reports, according to advices received from the United States consul at Nuevo Laredo. One of the features of this bulletin will be a section devoted to commercial advertisements, classified in alphabetical order, and published free of charge subject to certain conditions.

### GUANO CONCESSION.

Mr. AURELIO SANDOVAL has secured from the Mexican Government a 10-year concession for the extraction of guano, phosphate, and lime sulphate from the islands situated in the Gulf of California between parallel 22° and the United States boundary. The concessionaire shall pay the Government 75 cents Mexican currency per ton extracted.

### TRADE WITH THE UNITED STATES.

According to consular advices received from the various States of Mexico, the trade with the United States continues firm and on the increase. During the year 1910, the district of Ciudad Porfirio Diaz imported from the United States goods valued at $4,910,079, an amount representing nearly 95 per cent of the total imports of the State. The exports to the United States amounted to $500,353. The declared value of exports to the United States from the State of Aguascalientes amounted to $11,600,386.

### IMPORT OF COAL AT TAMPICO.

During the fiscal year ending June 30, 1910, there were imported at Tampico 210,686 tons of coal as compared with 132,032 tons for

the preceding year. Nearly all the coal imported is consumed by the national railways. Of the total imports of coal it is estimated that about 75 per cent comes from the United States.

### UNITED STATES CAPITAL IN SINALOA.

The United States consul at Mazatlan has recently submitted a list of the American mining investments in his consular district. The report shows a total of American capital amounting to $10,085,000.

### EXPLOITATION OF MINERAL WEALTH.

An interesting report from CLARENCE A. MILLER, the United States consul at Tampico, indicates great activity at present in the development of the oil regions in his district.

United States Consul WILBERT L. BONNEY reports that in number and area there are more quicksilver claims in San Luis Potosi than any other State in Mexico, and that recently a shipment of 400 flasks of quicksilver (26,000 pounds) was sent to New York.

From George B. Schmucker, the American consul at Ensenada, Lower California, comes the statement that the sulphur deposits situated in his district should offer a profitable field for development.

A comprehensive report on the mineral resources of the State of Chiapas has recently been submitted by ALBERT W. BRICKWOOD, the United States consul at that post.

### MINING IN SONORA.

The State of Sonora has at present 6,000 mining estates, divided into 130,000 mines producing gold, silver, copper and lead. During the last year 1,124 mining claims were registered, covering 24,000 mines. The total value of the mineral product of Sonora for 1909–10 was 20,000,000 pesos ($9,960,000 U. S. gold).

### IRRIGATION IN ZACATECAS.

The State government of Zacatecas is to build a large dam in El Salto Creek, 5 kilometers from Villa del Refugio. The basin will have a capacity of 2,000,000 cubic meters of water, sufficient to irrigate 400 hectares of land. The work of construction will be started shortly, and it is expected that the entire project will be completed within three years.

### IRRIGATION WORKS IN CHAPALA.

The Mexican Government has agreed to loan to the Chapala Hydroelectric and Irrigation Company the sum of 3,000,000 pesos ($1,494,000 U. S. gold) to continue the irrigation works in Chapala. The company will thus be enabled to complete the project within one year. The works will consist of draining the Chapala Lake and building a large basin for the waters diverted therefrom. The dis-

tribution of the waters shall be effected by means of an extensive system of canals, with the necessary pumps and hydraulic apparatus. The total cost of the project is estimated at 10,000,000 pesos ($4,980,000 U. S. gold).

### CURATIVE PROPERTIES OF PULQUE.

In a recent communication to the Pan American Union, Mr. A. Donaldson Smith, the United States consul at Aguascalientes, calls attention to the curative effect on certain forms of kidney diseases of drinking large quantities of fresh pulque. He writes:

> During the last 10 months several Americans have come to this town suffering from kidney trouble, and in each case, after seven or eight weeks' treatment, have gone away pronouncing themselves cured. I believe the pulque treatment alone, or certainly the drinking of fresh pulque, combined with a short residence in Aguascalientes, is worthy of scientific investigation. Only the sweet, fresh pulque seems to have a beneficial effect. I have traveled over the greater part of the world, and nowhere have I found such a perfect and equable climate as is to be enjoyed here the year around.

### NEW STEAMSHIP LINE TO MEXICO.

Unofficial reports announce that a new steamship line, known as the Mexican Fruit and Transportation Company has been organized at Los Angeles for the purpose of operating a passenger and freight service between Manzanillo, Mexico, and San Diego and San Pedro, California.

### RAILROAD FROM CAMACHO TO MAZAPIL.

Preparations are now being made looking toward an early start in the construction of the projected railroad from Camacho, Zacatecas, eastward to Mazapil, according to the United States consul at Saltillo.

At present a tram line of 24-inch gauge is being constructed from La Paz station on the Coahuila and Pacific division of the national lines.

## NICARAGUA

President Juan J. Estrada, of Nicaragua, has reorganized his Cabinet and announces the following changes: Secretary of Interior, Justice and Police, Gen. José María Moncada; Secretary of Foreign Affairs and Public Instruction, Sr. Don Salvador Calderón R.; Secretary of the Treasury and Public Credit, Sr. Don Adolfo Díaz; Secretary of War and Marine, Gen. Don Luis Mena; Secretary of Promotion and Public Works, Sr. Don Pedro Joaquín Chamorro.

# PANAMA

## BIDS FOR PANAMA-DAVID RAILROAD.

The Government of Panama has issued a call for bids for the construction of the Panama-David Railroad, with branch lines to Los Santos Province and the town of Anton, described in the February issue of the BULLETIN.

The bids in the United States must be presented not later than 3 p. m., June 30, 1911, at any of the following consulates of Panama: 18 Broadway, New York City; 906 Commercial Place, New Orleans; Suite 141 Masonic Temple, Chicago. Further information and particulars regarding the bids, etc., may be obtained by applying directly to above consulates.

## RATIFICATION OF HAGUE CONVENTIONS.

The Government of Panama has ratified the conventions concluded at the Second International Peace Conference at The Hague June 15 to October 16, 1907. The ratification bears the date of January 23, 1911, but was not published in the "Gaceta Oficial" until March 11, 1911.

## RATIFICATION OF RIO JANEIRO RESOLUTIONS.

The "Gaceta Oficial" of Panama for March 10, 1911, publishes the text of the legislative act approving the resolutions adopted by the Third Conference of American States held at Rio Janeiro in 1906.

## PATENT AND TRADE-MARK LAW AMENDED.

The "Gaceta Oficial" of Panama for March 4, 1911, contains a law of the legislative assembly, amending the act regulating the registration of patents and trade-marks in the Republic. Among other important changes is one empowering the Executive to reduce at his discretion the term of any patent whose registration is sought to 15, 10, or 5 years.

## IMPORT TARIFF CHANGES.

A presidential decree under date of January 23, 1911, provides for the following increases in the import duties of the Republic to become effective on May 1, 1911:

The duty on silks of all kinds, jewelry, furniture, silver or plated tableware, and perfumery is raised from 10 per cent to 15 per cent ad valorem. The duty on all other articles comprised in class 2 of the law of July 5, 1904, is raised from 10 per cent to 12½ per cent ad

valorem, with the exception of flour, lard, rice, and corn, the rate on these remaining at 10 per cent ad valorem.

Class 2 of the tariff referred to above comprises all articles, with the exception of those contained in the free list and those subject to special rates of duty, such as live animals, salt, tobacco, coffee, matches, and opium.

## FOREIGN TRADE, FIRST HALF, 1910.

The "Boletin de Estadistica," No. 19, of Panama, recently issued, contains a detailed statement of the foreign trade of the Republic for the first six months of 1910. Compared with the corresponding figures for 1909, the total exchange of trade has increased nearly 25 per cent.

| | First half, 1910. | First half, 1909. |
|---|---|---|
| Exports | $914,987.82 | $728,401.11 |
| Imports | 5,126,161.78 | 3,982,924.29 |
| Total foreign trade | 6,041,149.60 | 4,711,325.40 |

The following details show the exports and imports, classified by merchandise and countries, for the first half of 1910 as compared with the first half of 1909:

IMPORTS BY PRODUCTS.

| Merchandise. | First half, 1910. | First half, 1909. |
|---|---|---|
| Animal products | $897,669.11 | $713,083.90 |
| Vegetable products | 1,318,369.70 | 1,064,530.48 |
| Mineral products | 553,597.92 | 478,428.11 |
| Textiles and its manufactures | 922,381.01 | 714,157.58 |
| Chemical and pharmaceutical products | 254,285.41 | 162,166.98 |
| Alcoholic, fermented, and natural products | 391,306.30 | 302,336.44 |
| Paper and its derivations | 87,162.14 | 51,668.40 |
| Machinery and apparatus | 124,275.86 | 104,648.41 |
| Vehicles | 19,261.94 | 23,548.22 |
| Arms and explosives | 27,657.95 | 19,068.65 |
| Miscellaneous | 530,194.44 | 349,287.12 |
| Total | 5,126,161.78 | 3,982,924.29 |

IMPORTS, BY COUNTRIES OF ORIGIN.

| Country. | First half, 1910. | First half, 1909. |
|---|---|---|
| United States | $2,980,370.18 | $2,394,607.70 |
| Great Britain | 1,018,517.05 | 656,069.71 |
| Germany | 528,362.49 | 462,275.65 |
| France | 157,691.64 | 137,718.61 |
| Italy | 83,736.30 | 102,768.70 |
| Belgium | 46,754.43 | 52,515.73 |
| Spain | 85,932.91 | 50,573.12 |
| China and Japan | 80,758.30 | 71,412.47 |
| Switzerland | 49,691.41 | ..... |
| Spanish America | 94,347.07 | 54,982.40 |
| Total | 5,126,161.78 | 3,982,924.29 |

EXPORTS, BY PRODUCTS.

| Merchandise. | First half, 1910. | First half, 1909. |
|---|---|---|
| Animal products | $84,517.22 | $56,538.60 |
| Mineral products | 76,688.73 | 56,849.82 |
| Vegetal products | 753,781.87 | 610,618.99 |
| Miscellaneous | | 4,393.70 |
| Total | 914,987.82 | 728,401.11 |

EXPORTS, BY COUNTRIES OF DESTINATION.

| Country. | First half, 1910. | First half, 1909. |
|---|---|---|
| Germany | $33,552.41 | $39,227.90 |
| Austria-Hungary | | 971.00 |
| United States | 791,719.43 | 602,989.64 |
| Spain | | 500.00 |
| France | 1,530.00 | 2,900.00 |
| Great Britain | 88,185.98 | 79,180.57 |
| Spanish America | | 912.00 |
| Italy | | 1,720.00 |
| Total | 914,987.82 | 728,401.11 |

## COLONIZATION CONTRACT.

An important contract with the Government of Panama grants to Mr. ALBERT VOIGH, an American citizen, free of charge, 25,000 hectares of unappropriated public lands in the Chiriqui Province, between the Chiriqui Viejo River and the boundary with Costa Rica, for the establishment of a colony consisting of 500 American families. The concessionaire agrees to build, at his expense, roads and bridges necessary to afford the colony convenient communication. The land granted shall be divided into two equal parts, between which a town is to be built. All machinery and materials imported for the colony shall be exempt from customs duties.

## PANAMA RAILROAD EARNINGS.

The total earnings of the Panama Railroad Co. and the Panama Railroad Steamship Co. for the fiscal year ending June 30, 1910, recently published in the Sixty-first Annual Report of the Board of Directors, amounted to $6,100,788.83, as compared with $5,715,517.16 for the fiscal year 1909, an increase of $385,271.67. The operating expenses aggregated $4,358,426.92, as compared with $3,699,678.60 for 1909, an increase of $658,748.32, making a decrease in the earnings over operating expenses of $273,476.65. The net income for the 12 months was $1,254,777.80, as against $1,522,780.45 for the preceding year.

## DARIEN RAILROAD CONCESSION.

The "Gaceta Oficial" of Panama for March 13, 1911, publishes the text of a contract whereby Mr. AUGUSTO DRINK is authorized to

build and operate a railroad line which, starting at the mouth of the Piñas River, in the Darien region, Chepigana district, shall terminate at a point near the town of Santa Maria del Real, on the left shore of the Tuira River. The term of the concession is 75 years. The concessionaire may import free of duty all implements, machinery, rails, rolling stock, tools, and other materials necessary for the construction and maintenance of the line.

# PARAGUAY

### CONSULAR APPOINTMENTS.

According to advices from Asuncion, the capital of the Republic, Lieut. Col. PEDRO MENDOZA has been appointed Consul General of Paraguay at Bolivia. Lieut. Col. MAULIO SCHENONE has been made Inspector General of the consulates of Paraguay.

### POSTPONEMENT OF CENTENARY CELEBRATIONS.

The Senate of the Republic of Paraguay has decided to postpone indefinitely the centenary celebrations which were to have been held throughout the country during the present year.

### FOREIGN MILITARY INSTRUCTOR.

The Government of Paraguay has arranged with MAXIMILIANO JOFRE, a captain of artillery in the Chilean army, to act as Chief of Staff of the Paraguayan army. Capt. JOFRE will be commissioned with the rank of colonel.

### NEW DIRECTOR OF NATIONAL COLLEGE.

Mr. JUAN O'LEARY has been named director of the National College at Asuncion, Paraguay. The new director is a popular and able educator, highly respected in educational circles of the Republic. With his practical experience and prestige as a teacher, this useful institution will now enter upon a period of increased activity, which will enable it to extend its broadening influences throughout the Republic.

### MERCANTILE BANK DIVIDENDS.

At the next general meeting of the Mercantile Bank of Paraguay, to be held April 28, it is expected that a dividend of 12 per cent will be announced for the year 1910, the same as for the year preceding.

### TOBACCO DEPOSITS AT AGRICULTURAL BANK.

A new regulation governing the deposit of tobacco crops has recently become operative. The Agricultural Bank (Banco Agricola), in conjunction with the Executive, has announced that hereafter they will not receive into their deposits, before the 1st of April of each year, any tobacco of the new season's crop, nor with the Department of Inspection examine any before that date. This new ruling will keep the leaf from becoming heated and deteriorating the quality of tobacco exported.

### PRESS ASSOCIATION AT ASUNCION.

At a meeting of the representatives of the press recently held in the office of the "Daily Monitor" at Asuncion, a press association was organized. Dr. CIPRIANO IBAÑEZ, Minister of the Interior, was elected chairman of the governing board of the association.

### TRADE WITH THE UNITED STATES, 1910.

The only declared exports from Paraguay to the United States during 1909 and 1910, according to consular advices from Asuncion, were oil of petitgrain and one shipment of undressed furs, valued as follows:

| | 1909 | | 1910 | |
|---|---|---|---|---|
| | Pounds. | Value. | Pounds. | Value. |
| Furs, undressed | | | | $1,393 |
| Oil of petitgrain | 16,128 | $24,767 | 13,913 | 23,663 |
| Total | 16,128 | 24,767 | 13,913 | 25,056 |

Of importations from the United States during the year 1910 the new lines of merchandise especially noticeable are railroad materials, agricultural implements, school desks, and toilet preparations.

### TRANSPORTATION FACILITIES OF PARAGUAY.

CORNELIUS FERRIS, Jr., the United States Consul at Asuncion, has recently submitted a comprehensive report dealing, in part, with the transportation facilities of the Republic, from which the following information is quoted:

The regular means of approach to Paraguay is from Monteviedo and Buenos Aires by way of the Plata, Parana, and Paraguay Rivers. The distance from the latter city to Asuncion is 1,100 miles. Three transportation companies maintain regular lines of steamers between the River Plate ports and Asuncion. The Mihanovich Line runs two passenger steamers a week, making the trip up the river usually in five days and down in four. The first-class fare from Buenos Aires to Asuncion by this line is $42.46 American money. From Asuncion to Buenos Aires the fare is $33.97. This

line also has a large fleet of freight steamers running between Buenos Aires and Asuncion. The Lloyd Brazilero Line runs a passenger and freight steamer about every 15 days from Montevideo to Corumba, Brazil, about five days' journey above Asuncion, the boat calling at Asuncion. The Marina Mercante Argentina Line has five steamers running between Buenos Aires and Asuncion, one of which carries passengers and makes the trip every 28 days. The first-class passenger fare from Buenos Aires to Asuncion on that boat is $22.50. The time from Buenos Aires to Asuncion on the Marina Mercante Argentina Line varies according to the amount of traffic handled at intermediate points. From Asuncion to Buenos Aires the time is from four to five days.

Freight traffic on the river is subject to some irregularity on account of the varying depth of the channel; nor are there well-defined seasons of high and low water. As all steamers carrying freight to this point are obliged to navigate the broad estuary of the River Plate they must have certain nautical, seagoing properties. When freight enough is produced at interior points on this river system to provide traffic without going to the River Plate, the Mississippi River type of steamboat should find a great field of usefulness here. As it is, steamers running to Asuncion, and even to Corumba, draw 6 to 8 feet of water. When the river is high steamers drawing from 11 to 14 feet go as far as Corumba, about 800 miles north of here. During the writer's residence of 16 months in Asuncion there has rarely been more than an 8-foot channel to Ascuncion; much of the time it has been below that depth. The combination rail and boat passenger service between Buenos Aires and Asuncion has never been found practicable; the discomforts of the accommodations afforded, and the troublesome connections and transfers, far more than offsetting the slight saving of time.

## PROPOSED RAILWAY EXTENSION.

The extension of the Trans-Paraguayan Railway marks one of the most important undertakings in the development of the Republic. At present the main line of this road has been constructed from Santos, Brazil, to a point near the celebrated Iguazu Falls on the Iguazu River, but the proposed extension will lead it through the great quebracho, or ironwood, districts of Paraguay, Argentina, and Bolivia. It will also place these countries into direct railway communication with Brazil and Chile. Not only will the great tracts of quebracho and other timber lands be benefited, but extensive zones of rich agricultural and grazing lands will be thrown open to settlement and cultivation.

The proposed extension will also cross a number of important navigable rivers which, with their numerous tributaries, penetrate vast areas of only partially explored or wholly unexplored countries.

The railway will also tap the productive yerba maté region of the Upper Parana River, and, traversing the Republic of Paraguay, will arrive at Villa Hayes, a bustling port on the Paraguay River. From this point the extended railway will enter the partially explored Chaco territory noted the world over for its abounding forests of ironwood.

The completion of the proposed extension will place Paraguay and Brazil into rail communication with the port of Antofagasta, Chile, and with the great railway system of Bolivia and southern Peru.

# PERU

## CUSTOMS RECEIPTS IN 1910.

In 1910 customs receipts to the amount of £1,017,488,657 were collected from the following ports:

| | Pounds sterling. |
|---|---|
| Payta | 50,598,628 |
| Eten | 28,984,336 |
| Pacasmayo | 17,720,189 |
| Salaverry | 37,307,221 |
| Callao | 702,884,732 |
| Pisco | 24,521,648 |
| Mollendo | 146,710,029 |
| Ilo | 8,761,874 |
| | 1,017,488,657 |

## MUNICIPAL LOAN.

The municipality of Lima has been authorized to borrow £6,000, to be used exclusively for the payment of debts contracted by the municipal council up to December 31, 1910.

## TAX LIST OF MINES.

The Government of Peru has ordered that there be published a list of the mines of the Republic subject to taxation during the first half of 1911, and to include the mines which paid taxes for the last half of 1910. The list will be published in the Official Gazette of Lima, and a thousand separate copies will be printed by the Government for distribution.

## MILITARY SCHOOL AT CHORILLOS.

The Military School at Chorillos, a suburb of Lima, has been established for the purpose of educating and training officers for the Peruvian army. A thorough course of instruction, divided into two classes, is provided. From the graduates of the first class are chosen the higher officers, while corporals and sergeants are appointed from the graduates of the second class.

## DISTINCTION FOR DR. CORREA.

The National Geographic Society of Washington, D. C., has recently elected to honorary membership Dr. Carlos Larrabure y Correa, the distinguished historian and geographer of Peru.

## PERU AT THE INTERNATIONAL CONGRESS OF MUSIC.

The Government of Peru has accepted the invitation of the Government of Italy to participate in the International Congress of Music, to be held in Rome during April in honor of the fiftieth anniversary of Italian independence.

### MONUMENT TO PERUVIAN AVIATOR.

The Peruvian Congress has appropriated $20,000 for the erection of a monument in memory of JORGE CHÁVEZ, the celebrated Peruvian aviator who lost his life while crossing the Alps in an aeroplane. The monument is to be erected in the city of Domodossola, Italy, where the unfortunate accident occurred.

### NEW VANADIUM DEPOSITS.

Extensive asbestos and vanadium deposits have been recently discovered at Humalíes, near Huánaco. It is reported that these minerals are distributed over a mining zone of considerable extent adjacent to the place where the discovery was made, and that a syndicate is being organized to develop them.

### EXPLORATION OF DEPARTMENT OF LORETO.

The Federal Government, ever ready to encourage and promote the operations of reliable parties in the opening up and development of new territory in the Republic, has, in conformity with a departmental decree, commissioned Capt. JUAN MANUEL ONTANEDA, chief of the Hydrographic Office in Lima, to make a comprehensive study of the geography of the Department of Loreto, trace the course of its rivers, and prepare for consultation and reference the necessary maps and plans relating thereto.

Capt. ONTANEDA will be assisted in this important work by Capt. CARLOS F. GARCÍA ROSELL and First Lieut. MANUEL A. SOTIL, all of whom are practical technical experts. The expedition will also carry with it an able and competent personnel of assistants, and will be equipped with a complete outfit of instruments, supplies, boats, and everything necessary for a successful completion of this laudable undertaking in a most scientific manner.

On the termination of the labors of the commission a full and detailed report of the work accomplished, illustrated with maps and drawings, will be submitted to the Government of Peru. It will then be published for distribution, so that persons and organizations interested in the development of this exceedingly fertile and promising section of Peru may more readily inform themselves concerning its vast possibilities and inexhaustible fund of natural resources.

### STEEL BRIDGE OVER RIMAC RIVER.

A steel bridge, estimated to cost £5,000, will soon be constructed over the Rimac River, in Lima, at the point known as La Palma. This bridge is to be completed and turned over to the municipality of Lima within a period of 18 months from the time of signing the contract.

### TELEPHONE SERVICE BETWEEN LIMA AND ANCON.

The Department of Posts and Telegraphs of the Federal Government has been authorized to establish telephone communication between Lima and the popular bathing resort Ancon. The charges to subscribers at either Lima or Ancon will be 1 sol (50 cents) a month, and hotels and restaurants will be charged double that amount.

### INAUGURATION OF RAILWAY FROM IQUITOS TO MORONACOCHA.

The railway line from Iquitos to Moronacocha has recently been opened to public traffic. This new station is one of the most picturesque and popular pleasure resorts in the vicinity of Iquitos.

### EXTENSION OF SUPE-BARRANCA RAILWAY.

The Department of Public Works has contracted with the Reparticion to Alpas Railway to extend the line of the Supe-Barranca Railway to Alpas. This extension, which will have a 60-centimeter gauge, and be 26 kilometers long, will connect the Alpas estate with the port of Supe. It will thus be an important factor in developing the surrounding country, and in affording more adequate facilities for transporting the increasing agricultural and stock-raising products of the fertile valleys of Barranca and Pativilca.

The rich mines of the famous Provinces of Cajatambo and Bolognesi will also find, over this road, a convenient, cheap, and rapid outlet for their mineral products, while the mining industry in the zones adjacent to the large territory penetrated by this extension will be vigorously stimulated.

### PROPOSED RAILWAY FROM PACIFIC COAST TO FERROBAMBA.

A railway from the Pacific coast to the rich Ferrobamba mines, situated in the Province of Cotabambas, Department of Apurimac, is one of the important lines that will be constructed in the near future. It has been suggested that this railway start at Port Lomas, traverse the pampa of that name, follow along the left bank of the Acari River to the Amato ranch, cross the river, and continue to San Pedro, in the Province of Lucanas; from here the line will pass through the Quilcata pampa and proceed to the town of Pampachiri, Province of Andahuaylas, descending the canyon at that point, and touching at Talavera on the Apurimac River, crossing the river and proceeding to Ferrobamba. The entire distance from Port Lomas to Ferrobamba, over this route, is about 100 leagues, and the maximum grades are estimated at from 3 to 3½ per cent.

A railway constructed along this route would pass near the coal deposits of San Pedro, San Juan, Chilques, and San Cristobal, in the

Province of Lucanas. It would also pass through the rich gold, silver, and copper district of Querobamba, Province of Lucanas. It is estimated that the construction of the railway along this route would not exceed 6,000,000 sols ($3,000,000), and that it would be of immense benefit to the Provinces of Ayacucho and Apurimac.

# SALVADOR

## PRESIDENT ARAUJO'S INAUGURAL ADDRESS.

After taking the oath of office on March 1, 1911, Dr. Manuel Enrique Araujo, President of Salvador, delivered an address in which he outlined in forcible and eloquent terms the policies to be pursued by his administration.

He began by expressing to the people of Salvador his gratitude for the high honor conferred upon him, and declared that it shall be his duty to guard most zealously the great and vital interests of the nation, as a sacred trust of inestimable value, representing as they do the efforts and sacrifices of the country's heroes in their struggle for liberty.

Speaking of the foreign relations, President Araujo said:

> The family of nations daily tends toward the tightening of fraternal bonds, making effective the solidarity between themselves in order that they may be better able to fulfill their high mission of progress and civilization. El Salvador, though small in territory, has already attained international significance, thanks to the wisdom and loyalty of her diplomacy, and to her dignified and respectful attitude toward the other civilized nations. Considering as I do that the approximation of nations by a frank and sincere friendship is of primal interest, I will endeavor, by all the means that honor and culture advise, to widen and preserve the relations which happily exist between Salvador and other countries, above all with those who, by reason of origin and race and joint destiny, are closely bound to us by ties of affinity. I therefore solemnly declare that during the administrative period which to-day commences, the Government of the Republic will be to the other a sincere and loyal friend.

Referring then to his home policy, the new President stated that one of his aims will be to give equal attention to all the branches of the Government, respecting the nation's powers, and influencing respect for them. Nothing, he said, disturbs the organism of a commonwealth so much as the interference of one power with another; the legislative, the executive and the judicial should be regarded as federal states, each with its own laws, and collectively responsible.

One of his greatest aims, Dr. Araujo said, will be the maintenance of peace and order, these characteristics being the foundation of democracy, the all-potent factor of liberty, and the most fertile ground on which the republican institution can thrive and progress.

As to the finances of the Republic, the President said that he proposes to study carefully a means of increasing revenues without adding any further burdens on the people; that he would endeavor to reduce the expenses of the administration in so far as possible and consistent with public welfare.

Agriculture will be efficiently protected and promoted by special laws which will not only afford security to capital and labor but will also grant special privileges to farmers and workingmen; art, industries, and commerce will likewise receive the best attention of the administration.

Speaking of the means of communication, the Executive stated that, in order to give an impetus to the elements of production and promote the activity of the people, it is necessary that the present lines be maintained and improved, and new ones built.

In conclusion, Dr. ARAUJO paid a glowing tribute to Gen. FIGUEROA, the retiring President, and asked that the National Assembly pass a vote of thanks, as an expression of the country's appreciation of Gen. FIGUEROA's efforts and labors for the welfare of the Republic.

## DIRECT CONTROL OF EXECUTIVE DEPARTMENTS.

By virtue of an executive decree issued on the day of his inauguration, President ARAUJO has temporarily assumed the direct control of the executive departments. The following under secretaries have been appointed:

Under Secretary of Foreign Affairs, Dr. MANUEL CASTRO.

Under Secretary of Justice and Beneficense, Dr. JOSÉ ANTONIO CASTRO.

Under Secretary of Public Instruction, Dr. GUSTAVO S. BARÓN.

Under Secretary of Interior, Dr. CECILIO BUSTAMANTE.

Under Secretary of Promotion, Dr. JOSÉ MARIA PERALTA LAGOS.

Under Secretary of Finance and Public Credit, Señor CARLOS GARCIA PRIETO.

Under Secretary of War and Marine, Dr. EUSEBIO BRACAMONTE.

The same decree creates, as a separate branch of the administration, the Department of Agriculture, and appoints Señor MIGUEL DUEÑAS as under secretary thereof.

Dr. SALVADOR RODRIGUEZ, Secretary for Foreign Affairs in Gen. FIGUEROA's cabinet, is appointed private secretary to the President of the Republic.

## NEW CONSULAR LAW.

The law reorganizing the consular service of Salvador, recently enacted by the National Assembly, provides that the consular officers of the Republic shall be divided into two classes, namely, consuls *de carriere* (regular) and consuls *ad honorem*.

There shall be consuls general *de carriere* in the following places, with jurisdiction over the whole territory of the respective country: Hamburg, Germany; Antwerp, Belgium; Barcelona, Spain; San Francisco, Cal., United States; Mexico City, Mexico; Paris, France; London, Great Britain; Genoa, Italy; Guatemala City, Guatemala; Tegucigalpa, Honduras; Managua, Nicaragua; San Jose, Costa Rica.

Consuls *de carriere* are provided for the following places: Panama City, Panama; New York City, United States; Liverpool, England; Bordeaux, France; Berlin, Germany; and New Orleans, La., United States.

Consulates already established or that may hereafter be created shall be *ad honorem*.

Consuls general *de carriere* shall receive an annual salary of $3,600 gold, and the consuls *de carriere* $2,400 gold. Honorary consular officers may deduct, from the fees collected by them, such amounts as may be necessary to cover office expenses and the remuneration allowed them by article 186 of the organic law of the consular service.

Only citizens of the Republic of Salvador are eligible to the positions of consuls *de carriere*, while foreigners may be appointed consuls *ad honorem*.

## CUSTOMS REVENUES, 1910.

According to the last report of the Minister of Finance of Salvador the customs revenues for the calendar year 1910 amounted to 6,220,330.14 pesos, as compared with 6,624,114.89 pesos in 1909, distributed by customhouses as follows:

*Import duties.*

| | Pesos. |
|---|---|
| Sonsonate | 3,522,875.05 |
| La Union | 1,086,766.03 |
| La Libertad | 554,400.57 |
| General Treasury (parcels post) | 169,638.94 |
| Total | 5,333,680.59 |

*Export duties.*

| | |
|---|---|
| Sonsonate | 430,359.84 |
| La Union | 114,528.03 |
| La Libertad | 125,926.49 |
| El Triunfo | 215,835.19 |
| Total | 886,649.55 |

(The peso has an approximate value of $0.403 United States gold.)

## POPULATION IN 1910.

According to official estimates the population of Salvador in 1910 was 1,070,555 inhabitants. The number of foreigners in the Republic s estimated at 200,000.

## MINING INDUSTRY OF SALVADOR.

The BULLETIN is indebted to THOMAS EWING DABNEY, the United States Consul General at Salvador, for the following exhaustive statement of the mining industry of Salvador:

It may be said generally that with the exception of the low-lying fringe of coast land the entire Republic of Salvador is rich in minerals; especially the Departments of Santa Ana (Western Region); Chaltenango and Cabanas (Central Region); and Morazan, Union, and San Miguel (Eastern Region).

The principal foci are as follows: Western, Metapan (Department of Santa Ana); Central, Sensuntepeque (Department of Cabanas); Eastern, Union (Department of Union); San Miguel (Department of San Miguel).

In Chaltenango and Cabanas (Central) the industry, while promising, has not passed far beyond the incipient stage. A wagon road is, however, in course of construction between this region and San Salvador, which, when completed, should develop the district.

The Metapan (in Santa Ana—Western) is a famous region. With abundant veins of iron, copper, and lead it is also rich in auriferous silver, all of which are said to be inexhaustible. The iron and copper invite especial attention because of their quality. At present iron is worked in only two places, and by the antique methods that give scant results.

Metapan is connected with Santa Ana (distance, 56 kilometers) by a good wagon road; from Santa Ana is the railroad to the capital (San Salvador) and to the coast (Acajutla), 78 and 107 kilometers, respectively. When the Union-San Miguel-Metapan-Zacapa Railway is completed, the entire district will be thoroughly drained.

But it is the San Miguel (Eastern) district that is richest in mineral deposits. In this region, where attention is devoted mainly to the precious metals, silver is most abundant, though there is some gold in preponderating quantities.

The ore is capriciously concentrated in heavy deposits throughout quartz veins which traverse the volcanic formation of ashes, carbonates, etc., in various proportions, in all directions, mainly vertically.

The minerals most found in this region are iron pyrites, sulphurets of lead, zinc sulphides, and copper pyrites. There is some occasional arsenic and antimony. Sulphurets of lead are plentiful in general; and sulphides of zinc sometimes render the reduction of matrices difficult.

The principal minerals of value are sulphide of silver, sulphide of antimony, chloride of silver, and solid deposits of gold and silver.

It is needless to repeat the effect the completion of the above-named railroad will have on this region.

Veins are numerous in this country, and since the Spanish conquest the mines of Salvador have given up fortunes.

The principal mines are:

*Western district.*—Metapan (Santa Ana): San Jose and San Miguel, iron; El Brujo, copper.

*Central district.*—Cabañas: La Electricidad, Fichan, Los Amates, Santa Margarita, Santa Angela, La Quebrada, San Francisco, and El Zanjo, copper; San Enrique, Cola de Toro, Companero, Cerro de Avila, and Pepita de Oro, gold, which last runs $15 the ton.

Sensuntepeque (Cabañas): El Porvenir, silver and gold, besides many others.

*Eastern district.*—Morazan: El Divisadero, La Protectora, El Bosque, Carolina, El Gavilan, and Loma Larga, gold and silver, and many others.

Union: San Sebastian, gold, one of the richest mines in the country, and El Tabanco, gold; San Bartolo, Copetillos, and Eva, gold and silver.

San Miguel: La Poza (very rich), El Consuelo, Guadalupe, Hormiguero, La Rivera, Gallardo, Esperanza, Potosi, and Porvenir, gold, etc.

In 1864 the mining industry of modern Salvador was in swaddling clothes. During the 12 years from 1864 to 1875 the yield from all mineral ores amounted only to $93,067, but from 1876 to 1883 (except 1880, for which figures are unobtainable), 7 years, the increase increased nearly sixfold, total product, $507,805.57, and from 1886 to 1895 it amounted to $673,028.35.

In 1895 the industry suffered a temporary depression, but after the lapse of several years it received an added impulse.

The development from January, 1901, to June, 1910, will be seen from the following tables:

1901.

| | |
|---|---|
| Gold bullion | $21,386.80 |
| Mineral ore | 123,629.60 |
| Silver bars | 3,964.00 |
| Silver ore | 31,559.60 |
| Silver sheets | 3,220.00 |
| | 183,760.00 |

1902.

| | |
|---|---|
| Gold ingots | 1,600.00 |
| Mineral ore | 112,985.20 |
| | 114,585.20 |

1903.

| | |
|---|---|
| Auriferous silver | 7,835.21 |
| Gold bars | 12,057.42 |
| Gold and silver ore | 774,303.91 |
| Silver | 20,537.34 |
| | 814,733.88 |

1904.

| | |
|---|---|
| Auriferous silver | 22,615.43 |
| Copper ore | 240.48 |
| Gold ore | 6,450.82 |
| Gold and silver ore | 600,400.00 |
| Silver ore | 23,147.60 |
| | 652,854.33 |

1905.

| | |
|---|---|
| Auriferous silver | 55,768.00 |
| Gold ore | 261,027.20 |
| Mineral ore | 361,002.40 |
| Silver ore | 90,880.00 |
| | 768,677.60 |

1906.

| | |
|---|---|
| Auriferous silver | 113,305.60 |
| Gold bars | 536,716.40 |
| Gold bullion | 176,740.00 |
| Gold ore | 281,148.40 |
| Gold slimes | 5,984.00 |
| Gold and copper slimes | 9,724.00 |
| Gold and silver bars | 35,714.40 |
| Gold and silver ore | 81,858.80 |
| Gold and silver slimes | 54,524.00 |
| Silver ore | 950.40 |
| | 1,296,666.00 |

| | |
|---|---|
| 1907. | |
| Auriferous silver | $138,088.00 |
| Copper ore | 8,152.00 |
| Gold bars | 715,428.00 |
| Gold and silver ore | 1,852.00 |
| Lead ore | 33,656.00 |
| Silver ore | 326,389.00 |
| | 1,223,565.00 |
| 1908. | |
| Auriferous silver | 133,064.00 |
| Copper ore | 8,596.00 |
| Gold and silver bars | 1,166,236.00 |
| Gold and silver ore | 4,248.00 |
| Lead ore | 6,080.00 |
| | 1,318,224.00 |
| 1909. | |
| Auriferous silver | 111,584.00 |
| Copper and gold dust | 14,283.00 |
| Gold bars | 688,509.00 |
| Gold and silver | 300,745.00 |
| Lead | 469.00 |
| Mineral ores | 1,152.00 |
| | 1,116,717.00 |
| 1910. | |
| (January to June.) | |
| Auriferous silver | 76,147.00 |
| Gold bars | 270,072.00 |
| Lead bars | 520.00 |
| Silver bars | 213,831.00 |
| | 560,570.00 |

# UNITED STATES

### CIRCULO LITERARIO HISPANO.

The inaugural exercises of the Circulo Literario Hispano were held at the Waldorf Astoria, New York City, on April 4, 1911. An interesting program, which had been arranged for the occasion, was thoroughly enjoyed by the large gathering of members and invited guests present.

### THE YALE EXPEDITION TO PERU.

It is now definitely announced that the scientific expedition to Peru, headed by Prof. HIRAM BINGHAM of the Latin-American history department of Yale University, will leave New Haven on the 10th of June and be gone until December 18. The party, which will number about six, expect to make a cross section of the Andes

through a country that has never been scientifically explored and only mapped in the rudest possible way some fifty years ago. It is planned to spend about two months and a half in determining how far into the Amazon Jungle the Incas carried their civilization; and about a month reconnoitering the seventy-third meridian from the Amazon Valley to the ocean—a distance of about 300 miles. The balance of the time will be divided in explorations about Mount Coropuna, estimated to be 23,000 feet high and the highest mountain in South America, and Lake Parinacochas, which is now practically unknown.

### EIGHTH CONGRESS OF APPLIED CHEMISTRY.

The "Preliminary Announcement of the Eighth International Congress of Applied Chemistry," has been received by the Pan American Union. This convention, which will meet at Washington, D. C., and at New York City, September 4 to September 13, 1912, is the first of the eight International Congresses of Applied Chemistry which has officially been invited by a Government to meet in the country of that Government.

Official representatives will be appointed by nearly every State and Territory of the United States, and it is hoped that Latin-America, as well as Europe and Asia, will contribute their quota of delegates, as they have done in previous congresses of this organization.

The officers of the eighth congress are: Patron, His Excellency the President of the United States; honorary president, Edward W. Morley, West Hartford, Connecticut; president, William H. Nichols, 25 Broad Street, New York; treasurer, William J. Matheson, 182 Front Street, New York; secretary, Bernhard C. Hesse, 25 Broad Street, New York.

### HANDS-AROUND-THE-PACIFIC-CLUB.

A reorganization of the Pan-Pacific Bureau, of Honolulu, Hawaii, was recently effected, and a new name, "The-Hands-Around-The-Pacific-Club," adopted. The object of this society is to foster a spirit of good fellowship among the representatives of Pacific lands in Hawaii, and to promote a better acquaintance between these countries and Hawaii. The following officers were unanimously elected: T. F. Sedgwick, of Peru, president; V. L. Stevenson, of Australia, vice president; C. F. Maxwell, of New Zealand, treasurer; G. H. Tuttle, of California, secretary.

### REDUCTION IN TELEGRAPHIC RATES.

The following schedule of rates has been announced by the Central and South American Telegraph Company, of 64 Broad street, New York, for messages to Central and South American points:

| Countries. | Rate per word. | Countries. | Rate per word. |
|---|---|---|---|
| Isthmus of Panama | $0.53 | Bolivia | $0.85 |
| Colon | .50 | Chile | .85 |
| Panama | .50 | Argentina | .85 |
| Colombia | 1.14 | Uruguay | .85 |
| Buenaventura | 1.09 | Paraguay | .85 |
| Ecuador | 1.00 | Brazil (except Amazon River stations) | .85 |
| Peru | .85 | Pernambuco | .70 |

## PROFESSOR HUSSEY HONORED.

Professor WILLIAM J. HUSSEY, who is at the head of the Department of Astronomy in the University of Michigan, has been appointed to the directorship of the observatory of the University of La Plata, Argentine Republic. Professor HUSSEY will retain his present position at the University of Michigan, and has arranged to have the two observatories cooperate in the survey of the northern and southern heavens.

This appointment is a high tribute to Mr. HUSSEY'S scholarly attainments and contributions to the field of science. In 1906 he was awarded the "LALANDE prize" by the French Academy for his researches in stellar astronomy. Professor HUSSEY'S special field is double stars, of which he has discovered 1,337.

## CONSULAR REGULATIONS TO ECUADOR.

A new form of consular invoice became effective on April 1 on all shipments to Ecuador from the United States.

## STUDY OF EARTH DISTURBANCES.

The Pan American Union has recently received an instructive communication from HARRY FIELDING REID, of Johns Hopkins University, Baltimore, Maryland, touching on the recent earth disturbances at Honduras. Mr. REID is the special expert in charge of earthquake records for the United States Geological Survey.

Referring to the earthquake felt in Bonacca, Honduras, on January 1, 1910, Mr. REID states:

We know that the great majority of earthquakes occur along two great circles—one surrounding the Pacific Ocean and the other passing through the Himalayas, the Alps, the Antilles, and through certain sections of Central America. It is believed that these earthquakes are due to fractures or slippings of fissures in the crust of the earth, and a number of scientific men are studying the matter and are gradually learning more about the subject. The shock of January 1, 1910, was also reported from Swan Island, and recorded by seismographs at Panama, Havana, Porto Rico, and even in Europe.

After the strong shock of earthquake in San Francisco in 1906 a society was organized known as "The Seismological Society of America," and has lately increased its activity and begun the publication of a bulletin. There are a number of members in Central America, and it is desired to obtain as members everyone interested in this subject, and especially those who can help in securing information regarding earthquakes.

# URUGUAY

## MESSAGE OF THE PRESIDENT.

On February 15, 1911, President CLAUDIO WILLIMAN, whose term of office expired on March 1 last, delivered an important message to the Uruguayan Congress covering the four years of his administration. The message shows the excellent financial condition of the country at the present time, and also indicates that each financial year to which reference is made closed with a substantial surplus, as shown in the following table:

| Years. | Surplus. |
|---|---|
| 1906–7 | $2,149,984 |
| 1907–8 | 2,035,333 |
| 1908–9 | 1,716,012 |
| 1909–10 | 2,255,032 |
| Total surplus for the four years | 8,156,361 |

These resources supplied the Government with funds to continue the public works commenced by the previous administration, and to commence new works of a similar nature. The administration was also placed in a position to plan and complete sanitary works in some of the interior cities of the Republic, to encourage industry and farming, and to further increase the capital of the Bank of the Republic.

During President WILLIMAN'S administration a reduction was made in the export duties of meat products and the light dues were diminished, while the 5 per cent tax on salaries and pensions and the postal surcharges were eliminated. The following expenditures on public works, aggregating over $17,000,000, were made during the four years of the administration referred to:

| | |
|---|---|
| Construction of the port of Montevideo | $7,350,013 |
| Expropriations for the port | 452,855 |
| Unforeseen and subsidiary expenses | 534,352 |
| Sanitary works and various contracts | 428,750 |
| Construction of cart roads, boulevards, etc | 1,847,007 |
| For bridges and highways | 1,235,281 |
| Construction and repair of buildings, and expropriations | 4,798,728 |
| Construction of ports other than that of Montevideo, and construction and repair of moles | 466,083 |

The public debt on January 1, 1910, amounted to $135,808,784, made up as follows: Internal debt, $8,013,902; foreign debt, $125,234,882; and the international debt, $2,560,000. During the year 1910, debts were contracted to the amount of $1,031,406, made up of the

second series of the amortizable debt, $28,036, and the conversion loan, $1,003,370, while the debts redeemed consisted of the following items: Internal debt, $604,750; foreign debt, $1,922,063; and international debt, $84,500, leaving a net total on December 31, 1910, of $134,228,876.

The 45 per cent of the customs revenues assigned to the service of the consolidated debt and railway guarantees in 1910, produced $6,547,570, and as the requirements of said service were $4,524,032, a surplus of $2,023,538 was returned to the Government, as compared with a surplus of $1,617,749 in 1909. The 5 per cent of the customs revenues assigned to the service of the 5 per cent loan of 1906 yielded $805,628; the requirement for this was $472,544, leaving a surplus to be returned to the Government of $333,084, as compared with $207,432 in 1909. The 24 per cent of the customs revenues consigned to the service of the conversion loan produced $3,477,085; the requirements being but $1,938,340, left a surplus of $1,538,745, as compared with $1,442,288 in 1909.

The gross receipts of the Uruguayan railways in 1910 amounted to $5,303,184, the gross operating expenses were $2,941,726, and the net profits, $2,361,458. The gross receipts of the Uruguayan railways guaranteed by the State were, in 1910, $2,312,457, the expenses $1,318,157, and the net earnings $994,300. The length of the guaranteed lines open to traffic in 1910 were 1,340 kilometers, as compared with 1,254 kilometers in 1909, or an increase of 86 kilometers, represented by the two final sections of the eastern extension to the terminus at Melo. The total amount of the railway guarantee paid by the Government in 1910 was $608,749.

The total foreign commerce of the Republic of Uruguay in 1910, exports and imports, aggregated $82,890,521.

At the end of 1906 there were 619 public schools in the Republic, 671 at the close of 1907; in 1908 the number rose to 780, at the end of 1909, 788, and at the close of 1910, 793, while the number of pupils enrolled rose from 57,638 in 1907 to 74,717 in 1910. In 1906–7 the amount appropriated in the budget for school expenditures was $795,876; this total was increased to $1,665,976 in the present budget of 1910.

The full text of President Williman's message, comprising 20 pages, is published in the Diario Oficial of February 16, 1911.

### CABINET CHANGES IN URUGUAY.

The chargé d'affaires of Uruguay at Washington, Dr. Alfredo de Castro, informs the Bulletin that a new department has been created in the cabinet, that of justice and public instruction, and a few minor changes have been made in the names of some of the other portfolios.

The cabinet, as reorganized by President BATLLE Y ORDÓÑEZ, is now constituted as follows: Minister of interior and worship, Señor Dr. PEDRO MANINI Y RÍOS; minister of public works, Señor INGENIERO VICTOR SOUDRIERS; minister of finance, Señor INGENIERO JOSÉ SERRATO; minister of industries, labor, and communication, Señor Dr. EDUARDO ACEVEDO; minister of justice and public instruction, Señor Dr. JUAN BLENGIO ROCCA; minister of war and navy, Señor General JUAN BERNASSA Y JEREZ; minister of foreign affairs, Señor Dr. JOSÉ ROMEU.

## FEDERAL TAX ON REAL PROPERTY.

The 1910–11 tax on real estate belonging to private parties, excluding real property in the Department of the Capital, which is subject to a special law, has been fixed by the Congress of the Republic at the uniform rate of $0.0065 on the assessed valuation of the property.

## INDUSTRIAL AND PROFESSIONAL LICENSES.

A law regulating the payment of industrial and professional licenses for the fiscal year 1910–11 was promulgated by President WILLIMAN on January 9, 1911. This law, which contains 30 articles, divides licenses into 14 classes ranging from $5 to $50,000, according to the business, profession, or calling engaged in.

## MODIFICATION OF TAX ON PHARMACEUTICAL SPECIALTIES.

The Government has modified the stamp tax on pharmaceutical specialties in accordance with a notice published in the Diario Oficial of December 24, 1910. This modification affects certain mineral and medicinal waters, liniments, soaps, perfumery, toilet preparations, and patented products.

## ADVANCE COMMERCIAL STATISTICS, 1910.

Although no official figures covering the foreign commerce of Uruguay for 1910 have yet been issued, the BULLETIN is in receipt of the following advance figures from the United States vice consul at Uruguay, F. Landon Goding:

| | Importation. | Exportation. |
|---|---|---|
| 1906 | $11,783,108.30 | $1,517,850.99 |
| 1907 | 12,176,813.11 | 1,481,388.46 |
| 1908 | 12,457,390.05 | 1,696,782.63 |
| 1909 | 12,665,384.32 | 1,877,794.66 |
| 1910 | 13,895,194.96 | 1,868,717.18 |

### MOVEMENT OF VESSELS, 1910.

The movement of vessels at the port of Montevideo for the year 1910 included 1,827 steamers of 5,215,750 tons; 150 sailing vessels of 166,722 tons; 1,100 ocean steamers from river ports of 3,103,341 tons; 37 sailing vessels of 29,136 tons. The coasting and river trade required 1,312 steamers of 963,686 tons and 1,251 sailing vessels of 51,961 tons, not including fishing and pilot vessels.

### CUSTOMS REVENUE OF URUGUAY, 1910.

The following table gives a comparative statement of the monthly customs receipts for the years 1909 and 1910:

| | 1909 | 1910 |
|---|---|---|
| January | $1,195,336.05 | $1,325,114.31 |
| February | 1,346,173.91 | 1,432,692.82 |
| March | 1,614,624.09 | 1,650,582.64 |
| April | 1,111,132.26 | 1,365,364.95 |
| May | 1,080,271.50 | 1,291,088.59 |
| June | 1,013,358.26 | 1,263,561.44 |
| July | 1,163,826.97 | 1,206,497.05 |
| August | 1,191,651.91 | 1,325,955.07 |
| September | 1,320,074.71 | 1,371,571.01 |
| October | 1,202,592.67 | 1,132,060.42 |
| November | 1,147,047.22 | 1,129,596.40 |
| December | 1,146,750.46 | 1,268,822.43 |
| Total | 14,532,840.01 | 15,762,907.13 |

During the year 1910 there was an increase over the corresponding month in 1909 in every month except October and November.

### SPECIAL OFFICIAL STAMPS.

The postal authorities of Uruguay have issued a special series of official stamps for use on official correspondence. The values and colors of these stamps are as follows: 2 cents, brick red; 5 cents, blue; 8 cents, dark gray; 20 cents, brown; 23 cents, dull green; 50 cents, orange yellow, and $1, vermilion.

### COMMEMORATIVE POSTAGE STAMPS.

The Government of Uruguay, with the consent of all the countries of South America, placed in circulation from January 6, 1911, to the end of that month, 200,000 5-cent postage stamps commemorative of the First South American Postal Congress.

### DELEGATES TO CONGRESSES.

The Government of Uruguay has appointed Dr. A. TURENNE to serve as its delegate to the International Congress for the Protection of Children, to be held in Berlin. It has also designated Dr. L. GARABELLI to represent it at the International Music Congress to be held in Rome.

### SCHOOL FOR POLICE INSTRUCTION.

A school for police instruction has been established by the Federal Government in the city of Montevideo, for instructing the police force in matters connected with the performance of their duties. Diplomas will be issued to those completing the course and passing the required examinations, and the graduates of the school will be given preference in promotions in the police force.

### NEW UNIVERSITY BUILDING.

The new State University Building, erected in the city of Montevideo, to meet the growing needs of the departments of law and mathematics, was inaugurated on January 22, 1911. The President of the Republic, minister of the interior, rector of the university, dean of the faculty of law, the representative of the federation of students, and many other notable persons were present at the dedication.

The building occupies a splendid location on Calle 18 de Julio, formerly used by the old School of Arts and Trades, and covers nearly two squares of ground, or an area of 14,533 square meters. The cost of the building was about $2,000,000. The designs were prepared by the Uruguayan architects, Silvio Geranio and J. M. Aubriot, and represent a modified Renaissance style. The structure has an imposing frontage, and is considered one of the finest university buildings in South America.

### INTERNATIONAL OFFICE OF AMERICAN STUDENTS.

The Second International Congress of American Students, held in Buenos Aires in July, 1910, has established an international office of the Congress in Montevideo. The records and files of the congresses are to be kept here and the office will be the headquarters of the students organizations of the Continent. A special committee has been appointed to prepare rules and regulations for the guidance of federations of students and students' leagues which will cooperate in the work of this international office.

### MISCELLANEOUS CONSULAR NOTES.

F. L. Goding, the United States vice consul at Montevideo, reports that the Uruguayan Government is actively engaged in paving large sections of the city of Montevideo with asphalt and has entered into several large contracts for this work.

### NEW SANITARY IMPROVEMENTS.

The department of public works has approved the plans submitted by Allard & Co., port constructors, for water supply and drainage of the cities of Colonia, Mercedes, and San Jose.

### WIRELESS TELEGRAPH STATION AT MONTEVIDEO.

The central wireless telegraph station of the Republic has been established at Victoria Hill, Montevideo. When this station is placed into operation it is predicted that wireless communication will be rendered easy with the Bage and Yaguaron stations as well as other important points on the Uruguayan frontier. It will also be possible to communicate by wireless with the coast. Customs revenue cutters and ships of the national squadron can also communicate by wireless, through the Yaguaron River station, with the central office at Victoria Hill.

### CONSTRUCTION AND REPAIR OF BRIDGES.

The Government of Uruguay will expend $400,000 in the construction and repair of wagon road bridges. Six new bridges will be constructed; three are to be in the province of Durazno, two in the Department of Minas, and one in the Department of Maldonado.

### TERMINAL AT FRAY BENTOS.

The branch of the Midland Railway from Algorta to Fray Bentos will soon be opened to public traffic. There has also been constructed at this point a pier 225 meters long and from 15 to 20 meters wide, enabling the largest ocean vessels to dock here.

### PROPOSED CONNECTION OF URUGUAYAN AND BRAZILIAN RAILWAY SYSTEMS.

The Government of Uruguay has conditionally approved the plan presented by the northern extension of the Central Uruguay Railway for extending the line at Rivera, on the Brazilian boundary, till it connects with the Brazilian railway systems. The difference of gauge in the two systems will necessitate the employment of three rails on the new extension.

### RAILWAY BETWEEN TRINIDAD AND DURAZNO.

The department of public works of Uruguay has approved the plans for the first section of 50 kilometers of the Interior Railway, also known as the Pan American Railway, between Trinidad and Durazno.

### RAILWAYS IN 1910.

The year 1910 was productive of excellent results for the Uruguayan railways, the passenger, freight, and baggage traffic having greatly increased as compared with the business handled in former years. This fact may be regarded as a reliable index of the progress prosperity, and development of the Republic.

The railway system of Uruguay may be classified into three groups: The first and principal railway of the country is the Uruguay Central, including the Northeastern, and the extensions to the north, east, and west. Its gross earnings for 1909–10 were £577,489, and the total expenses during that period were £287,959. The second group is the Midland Railway, which comprises under its management the Northwestern and the Northern Railways. The third group is the Uruguay Eastern Railway. A number of important railway projects are now in process of development, many of which will soon be undertaken.

The subsidy paid by the Government of Uruguay to railways in the Republic during 1910 amounted to $164,670.81.

# VENEZUELA

### TARIFF CLASSIFICATION CHANGES.

The vice consul at La Guaira submits the following statement covering a recent change in the tariff classification:

"Ink for shoe blacking," class 4, duty 0.75 bolivar plus 55 per cent plus 1 per cent surcharge per kilogram gross weight. The manifestation in consular invoice shall be "Tinta para Calzado."

"Sweepine," a floor disinfectant in class 1, duty 0.05 bolivar plus 55 per cent plus 1 per cent surcharge per kilogram gross weight. The manifestation in consular invoice shall be "Fibras disenfectante para pavimientos." (Bolivar, $0.193; kilogram, 2.2046 pounds.)

### ASPHALT LEASE.

The Government of Venezuela has entered into a contract with Gen. José Maria Garcia for a 30-year lease of the Inciarte asphalt mine, together with the railroad line, plant, machinery, and other appurtenances, which formerly was the joint property of the United States and Venezuela.

### EXPORTS FROM NEW YORK IN 1910.

The report of Señor Jacinto López, consul general of Venezuela in New York, shows that the exports from that port to Venezuela during 1910 amounted to 20,083,974 bolivares, as against 16,122,223 bolivares in 1909, or an increase of 3,991,751 bolivares. According to the same report the number of vessels cleared from New York for Venezuelan ports was 156, as compared with 136 in 1909. (The bolivar is equivalent to approximately 20 cents United States gold.)

### POPULATION IN 1910.

According to estimates made by the director general of statistics of Venezuela the population of the Republic in 1910 was 2,685,606, as compared with 2,323,527 shown by the census of 1891.

### SUGAR REFINERY FOR VENEZUELA.

The United States consul at Puerto Cabello reports that arrangements are being made to establish a sugar factory at the "Valle de Valencia," a place near Lake Valencia and about 100 miles from Puerto Cabello. It is expected that an association will be formed at Caracas or Valencia under the name of Los Centrales Azucareres.



INTERNATIONAL UNION OF AMERICAN REPUBLICS

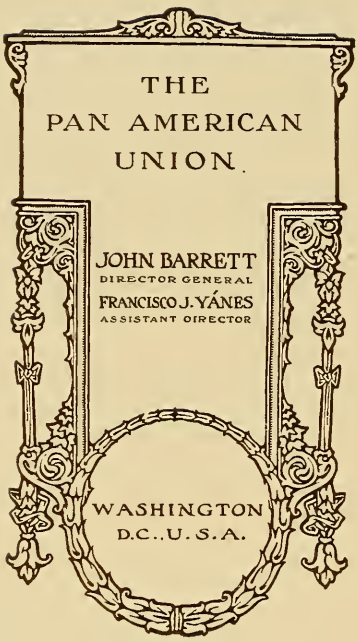
# BULLETIN

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SEÑOR DON EMILIO ESTRADA,

President-elect of the Republic of Ecuador, who will be inaugurated into office on August 10, 1911.

BULLETIN
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THE presentation to Mr. CARNEGIE of the Pan American medal voted him as a benefactor of humanity by the Fourth International Conference of American States, held at Buenos Aires last summer, was a notable occasion in the history of the Pan American Union. The exercises took place on Friday afternoon, May 5, in the noble Hall of the Americas, in the Pan American Building, which was erected largely through the generosity of Mr. CARNEGIE, and consisted of addresses by the President of the United States, the Secretary of State of the United States, the Ambassador of Mexico, and Mr. CARNEGIE himself, opened by the invocation of Right Rev. Mgr. WILLIAM T. RUSSELL, D. D., and closed with a benediction pronounced by Rev. ROLAND COTTON SMITH, D. D. Every seat in the spacious hall was taken by an audience numbering 1,000 persons and including members of the Diplomatic Corps, Supreme Court judges, Cabinet officers, Senators, Congressmen, and other high officials.

After the exercises were concluded, Mr. CARNEGIE surprised and delighted the members of the Governing Board and the Director General by making the announcement, in the form of a letter which he addressed to Senator ELIHU ROOT, of New York, that he would give $100,000, in addition to the amount already contributed by him for the building, to be used in the improvement of its grounds and giving it a proper setting.

This letter follows:

DEAR SENATOR ROOT: I learnt yesterday from Mr. BARRETT, Director General of the Pan American Union, that the original plans for the building included a scheme of landscape gardening and ornamental walls surrounding it. To-day I can not repress the desire to send to the old account in your name, which I hear is still open, $100,000, which I am informed will be ample to give the gem its proper setting, which may be taken as evidence of my grateful appreciation of the unique honor conferred upon me this afternoon by the 21 sister American Republics, which I fondly trust are soon to be linked by treaty in the bonds of everlasting international peace, as our English-speaking race is sure to be upon the invitation of our peace-loving President.

Our sister Republics need no repetition of his earnest desire, often expressed, that war between the sisters should cease forever.

Sincerely yours for peace, ANDREW CARNEGIE.

The importance of this gift can be best appreciated when it is borne in mind that the Pan American Building is located on a plot of land covering an area of 5 acres, or somewhat over 2 hectares, and situated in a particularly commanding position at the main entrance to Potomac Park, the most accessible larger park of the Capital. Facing this park on the south and looking out upon the Potomac River, Arlington, and Fort Myer, in a southerly and westerly direction, fronting also the Presidential Park or White Lot on the east, and overlooking, as it were, the Washington Monument, with a vista of the Mall, it occupies a position almost unique among the public buildings of the District of Columbia. It is, therefore, most fitting that everything possible should be done, consistent with artistic effect, to give this temple of peace, commerce, and friendship a proper setting and environment. In the original designs made by the architects a plan for the grounds was carefully worked out in detail, but they were not included in the main contract for the erection of the building, as it was deemed best by the Governing Board to devote all the funds available toward its actual construction and completion.

## PEACE THROUGH DOLLARS INSTEAD OF BULLETS.

One of the most notable addresses delivered at the Third National Peace Congress held at Baltimore, Maryland, during the first week of May was that of the Hon. HUNTINGTON WILSON, Assistant Secretary of State. Elsewhere in this issue of the BULLETIN we take pleasure in reproducing it. A translation also appears in the Spanish-Portuguese edition. In this speech Mr. WILSON discussed interestingly and ably what has been described as "dollar diplomacy." In defining this term he said, among other things, "It means the substitution of dollars for bullets." An expression as apt as this one is sure to be widely quoted and commented upon throughout the world and become a new slogan for the development of peace through commerce.

## CALL FOR DELEGATES TO SANITARY CONFERENCE.

The Director General takes especial pleasure in directing attention to the official correspondence in regard to the call for the Fifth International Sanitary Conference, to be held in Santiago, Chile, November 1–12, 1911, under the presidency of Dr. ALEXANDER DEL RIO and the auspices of the Chilean Government. The complete data, together with the tentative program, is printed in full elsewhere in this issue of the BULLETIN. It is earnestly hoped that representatives will be delegated from every American Republic to participate in the proceedings of this important gathering, which is doing such a splendid work in maintaining and promoting the highest standards of hygiene and sanitation in the American Republics.

### RETURN OF THE MINISTER OF SALVADOR.

The Pan American Union takes pleasure in welcoming back to Washington Sr. Don FEDERICO MEJÍA, Minister of Salvador, who has recently returned from a visit to his home. Minister MEJÍA has been appointed by his Government as special representative at the International Conference for the Protection of Industrial Property, which meets in Washington on May 15, 1911.

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### DEPARTURE OF THE MINISTER OF ECUADOR.

Dr. RAFAEL M. ARÍZAGA, Minister of Ecuador in Washington, and its representative on the Governing Board of the Pan American Union, has resigned from his post and left for Quito via Europe. The Pan American Union desires to express on this occasion its high appreciation of Doctor ARÍZAGA'S interest in the welfare of the institution and his readiness to collaborate at all times in the work of propaganda on behalf of his country. At the last regular meeting of the Governing Board a resolution was unanimously adopted expressing its regret at Doctor ARÍZAGA'S separation from among its members. Doctor ARÍZAGA may always be sure of the best wishes of the Pan American Union for his prosperity and happiness.

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### A NEW BOOK ON THE PAN AMERICAN UNION.

In the next issue of the BULLETIN there will appear a more extended notice of a book which has just been prepared by Director General BARRETT, entitled "The Pan American Union—Commerce, Friendship, and Peace." The purpose of this publication is to give in succinct form important descriptive facts about each of the 20 Latin American Republics, together with a comprehensive story of the practical work and history of the Union, a description of the architectural and artistic features of its beautiful new building, and a narrative of what Pan America has done for peace. It is an attractively bound and properly illustrated cloth-bound book of 253 pages, and can be obtained from the Pan American Union for $1 a copy, which represents simply the actual cost of preparation and printing.

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### REPORT OF THE PAN AMERICAN COMMERCIAL CONFERENCE.

The full report of the Proceedings of the Pan American Commercial Conference, held in February, under the auspices of the Pan American Union, has just been published. It makes an attractively paper-bound pamphlet of over 300 pages, containing the most complete, comprehensive, and useful information on trade conditions, relations, and opportunities in the American Republics ever published under one cover.



Photograph by Harris-Ewing.

THE LATE DR. JOSÉ MADRIZ,

A distinguished Nicaraguan statesman.

Dr. Madriz died in the City of Mexico on May 15, 1911. As head of the Nicaraguan Delegation, he took a prominent part in the Central American Peace Conference of Washington (1907), of which he was the Secretary General. Besides other important posts, he has held successively those of Minister of Foreign Affairs and Associate Justice of the Central American Arbitration Court, from which he was called to assume the Provisional Presidency of Nicaragua, resigning in August, 1910. At the time of his death he was practicing law in the City of Mexico. At the funeral the Mexican Government paid him the honors due the high position he had held.

Its subject matter consists not only of the principal addresses and papers delivered and read by a large number of trade experts and such distinguished men as the President of the United States, the Secretary of State, Latin American ambassadors and ministers, etc., but also the discussions and arguments which took place on the different features of the exchange of trade between North and South America. It is also illustrated with trade diagrams, and contains a full list of the speakers and trade authorities, the delegates in attendance, and a comprehensive index. It was necessary to make a small charge of 50 cents a copy to cover the expense of preparation and printing, and any person desiring the report can secure it by remitting that amount to the Pan American Union.

Echoes of the conference still keep coming, and among the numerous received, in addition to those quoted in the past two issues of the BULLETIN, is one from S. W. ECKMAN, Export Manager of B. T. Babbitt (Incorporated), one of the leading soap manufacturers of the world, who says:

> When one considers the conflicting interests represented, the number of delegates, and all the multitude of details requiring your attention, I think you did admirably throughout, and in congratulating you heartily upon the great success of the Conference, I also congratulate the American manufacturers for having as the head of such an institution as the Pan American Union a man so very well versed on the commercial situation and possibly on the countries of Latin America, so enthusiastic over the prospects of our greater trade relations with those countries, and so willing to help us take advantage of our opportunities.

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### MR. SANTAMARINA AND THE COMMERCIAL CONFERENCE.

A prominent man in attendance at the Pan American Commercial Conference which was held in the Pan American Union Building last February was Mr. J. P. SANTAMARINA, of Buenos Aires, Argentina. He is one of the best posted men of that country upon its commerce with the rest of the world, and while in this country acted as a correspondent of "La Razón," a leading evening paper of the Argentine capital. Mr. SANTAMARINA has just been appointed delegate of the Argentine Republic to the expositions which are being held in Rome and Turin, Italy, but before leaving Buenos Aires for his new post he was good enough to write a letter to the Director General in which he used the following words:

> The success of the first Congress was so grand that I feel sure all the Governments will give you their very best support as regards the great future of the Pan American Union.

The letter also carried the interesting information that Mr. SANTAMARINA will arrive in New York about the 1st of September and will deliver a series of addresses before the principal universities and chambers of commerce in the United States, in which he will describe the Argentine Republic and the economic conditions which are bringing that country to the front. Under the title of "American Commerce" the

Buenos Aires Herald of April 7 publishes a most interesting interview with Mr. J. P. SANTAMARINA, in which, among other things, he says:

It might be said that never had Washington seen a more notable assembly in the Union Building, and it was surely the first time in the history of the United States that so many illustrious men had come together to pronounce the word of fraternity amongst the American Republics. Great credit is due to the organizers of the first Pan American Commercial Congress, and the States are greatly indebted to the Hon. JOHN BARRETT, Director General, and Mr. FRANCISCO YANES, Assistant Director, for their efforts in bringing together not only the most eminent statesmen of the United States but the diplomatic corps of Washington and the leading representatives of American industries. It is not an easy task to bring into one hall, on a certain day and at a certain hour, all the leaders of American manufacturers; this was, however, accomplished by the officers of the Pan American Union.

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## RETURN TO THE UNITED STATES OF MINISTER KNOWLES.

Mr. HORACE G. KNOWLES, United States Minister to Bolivia, has recently returned to Washington, and is most enthusiastic over the resources and wealth of Bolivia. In an interview which he gave to the correspondent of the Philadelphia Public Ledger, appearing in that paper of Saturday morning, May 6, 1911, under the title of "Riches In Bolivia Await Enterprise," Mr. KNOWLES tells a story which is in line with what the BULLETIN has published in the past and which has served to attract considerable attention to that remarkable country.

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## THE DIRECTOR GENERAL A GUEST OF THE VICE PRESIDENT.

Among the invitations which have been accepted by the Director General in his efforts to spread interest in Pan American affairs was that extended to him by the Chamber of Commerce of Utica, New York, through Hon. JAMES S. SHERMAN, Vice-President of the United States, to attend the annual banquet of that organization, held on the evening of April 24. The other guests going from Washington were His Excellency Count J. H. VON BERNSTORFF, the Ambassador of Germany, and Hon. WELDON B. HEYBURN, the United States Senator from Idaho, who were escorted by the Vice-President and his Secretary, Hon. H. E. DEVENDORF, in a special private car from Washington to Utica and return. During their stay in Utica they were taken out to Hamilton College, in the town of Clinton, from which Hon. ELIHU ROOT and Vice-President SHERMAN graduated. Later a lunch, to which were invited the representative men of Utica, was given them by Hon. T. R. PROCTOR, one of the most prominent men of the northern section of New York State. The dinner in the evening was attended by 500 to 600 of the principal business and professional men of the city, and was presided over by the President of the Chamber, W. I. TABER, Esq. While the Director General's principal



Photograph by G. V. Buck.

SEÑOR DR. RAFAEL MARIO ARÍZAGA,

Retiring Minister of Ecuador to the United States.

address was before the Chamber of Commerce, he took occasion, however, when called upon at Hamilton College, to say a few words to the students about ELIHU ROOT, who holds such a strong place in the hearts of all those interested in Pan American relations. There is quoted below an extract of the remarks from the Director General on this occasion:

I feel to-day extreme gratification that I can see the college which educated the man who has had more influence on my life than any other living statesman; the man I regard as one of the greatest Secretaries of State which this country, if not the world, has produced. I look with reverence upon the little house yonder where he was born, and I reflect upon what he has done for the friendship and comity of nations. To him, more than to any other American, is due the reorganization and building up of the Pan American Union—an organization devoted to the advancement of peace, commerce, and friendship among the American Republics.

He made an unprecedented journey around the Southern Hemisphere and received a welcome everywhere that could not have been greater or warmer had it been planned for 100 years or had he been the monarch of a great empire. He made addresses which went to the hearts of the Latin Americans. He was received as the apostle of a new diplomacy, the diplomacy of truth and confidence. After he had been welcomed with great acclaim in Rio de Janeiro, Montevideo, and Buenos Aires, he went around to Santiago de Chile, which rose from the ashes of its earthquake to greet him. In Peru the Government declared a whole week's holiday in his honor. As a result of his journey, the reorganization of the Pan American Union was effected.

I am, therefore, proud to have the opportunity of visiting the university which has among its graduates such men as ELIHU ROOT and Vice-President SHERMAN.

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## A NEW BRAZILIAN-UNITED STATES STEAMSHIP LINE.

It is significant of the development of closer commercial relations between the United States and Latin America that there are now visiting the United States Dr. EUGENIO DAHNE and Dr. GASTAO NETTO DOS REIS, special envoys of the Brazilian Government, sent to the United States to investigate the organization of a direct steamship line between New Orleans and Brazil, and to proffer the support of Brazil in this movement. President PORCH, of the Progressive Union of New Orleans, has long been working for the development of better trade facilities between the Mississippi Valley and Latin America, and delivered a most interesting address upon this subject at the Pan American Commercial Conference held under the auspices of the Pan American Union last February. As a result of the efforts of himself and other representative men in New Orleans and St. Louis, Mr. SIDNEY STORY was sent as special delegate to Brazil to study the opportunities for the exchange of trade between that country and the Mississippi Valley, and the possibilities of a direct steamship line. His persistent and successful efforts finally influenced the Brazilian Government to send the two gentlemen above named to the United States to cooperate with the men in this country who are planning to establish this line. The Brazilian envoys arrived in New Orleans the latter part of April and then proceeded to St. Louis. Later they will



SEÑOR DON FEDERICO MEJÍA,

Minister of Salvador to the United States, who has just returned to Washington from a visit to his country.

come East and visit Washington, when they will probably be presented to the President of the United States. The Director General of the Pan American Union extends to these distinguished Brazilians a very hearty welcome and assures them of his deep interest in what they are undertaking for the establishment of better shipping facilities and more trade between their country and the United States.

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### MR. PERCY F. MARTIN AND LATIN AMERICA.

After a tour through South and Central American States, which has extended over a period of eighteen months, Mr. PERCY F. MARTIN, F. R. G. S., the well-known author and journalist of England, has returned to his home. Mr. MARTIN has been in search of data for two further volumes of the series of Latin-American publications, known as the "Twentieth Century" to follow upon his "Mexcio." The two additions are entitled, "Peru of the Twentieth Century," and "Salvador of the Twentieth Century," both being due for publication this year. During his long and interesting travels, the noted journalist acted as correspondent for the London Times, the Financial Times, The Engineer, The Railway Gazette, The British Trade Journal, The South American Journal, and other well-known British publications. Mr. MARTIN reports that he has had the pleasure of personal interviews with the Presidents and Finance Ministers of Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay, Peru, Venezuela, Costa Rica, Guatemala, Honduras, Nicaragua, Panama, and Salvador. In addition to the two volumes before mentioned, Mr. MARTIN is at work on an extensive article entitled "The Panama Canal in 1911." This will appear as a Special Supplement to the June number of "The Engineer," and it is said will be one of the most interesting and authoritative accounts of the great Isthmian Canal which has yet appeared.

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### VISIT OF THE "DELAWARE" TO CHILE.

The officers of the U. S. S. *Delaware*, which conveyed the body of Sr. Don ANIBAL CRUZ, the late Minister of Chile to the United States, to Valparaiso, returned with expressions of great praise for the hospitality and kindness shown them by the officials and people of Chile. They say that they could not have been shown more courteous and agreeable attention than was accorded them from the day they arrived until the time of their departure. They also speak most kindly of the interest which the United States Minister, Hon. HENRY P. FLETCHER, took in their visit, and compliment highly his administration of the office of United States Minister.



Photograph by Harris-Ewing.

SEÑOR DON CARLOS MARIA DE PENA,

The new Envoy Extraordinary and Minister Plenipotentiary of Uruguay to the United States.

### MR. COLQUHOUN ON "SEA POWER IN THE PACIFIC."

The Director General has just read with much interest the manuscript prepared by ARCHIBALD R. COLQUHOUN, Gold Medalist, Royal Geographical Society, on "Sea Power in the Pacific," which was read at the Royal United Service Institution, Wednesday, April 5, 1911. Mr. COLQUHOUN is one of the best authorities in the world on subjects of this kind, and everything he writes is worthy not only of reading, but of close consideration. The Director General has had the pleasure of knowing Mr. COLQUHOUN for many years, having met him first in the Orient, and congratulates him upon this further contribution to the literature of international relationship.

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### THE AMERICAN FEDERATION OF ART.

On Thursday evening, May 18, the Hall of the Americas of the Pan American Union Building was the scene of an interesting reception given by the Board of Directors of the American Federation of Art in compliment to the delegates to the annual convention of that organization. In the speeches that were made, as well as in the remarks of those present, there were many references to the exquisite beauty of the Pan American Building, and also to the enhancement of the artistic beauty of the section of Washington in which the building is located as a result of the expenditure of the money which Mr. CARNEGIE has recently given for the improvement of its grounds and setting.

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### IMPORTANT TARIFF CHANGE IN SALVADOR.

The Salvadorian National Legislative Assembly has recently enacted two new laws making important changes in the tariff of Salvador. There are reductions in the rates on some classes of cotton goods, and sulphate of quinine is put on the free list. Flour remains unchanged, and there are reductions in material used in the manufacture of soap and candles. On all the remaining schedules there has been an increase in that portion of the duties payable in gold. There has been also an increase in the nature of an additional tax on the exports of rice, balsam, hides, skins of all kinds, rubber, leaf tobacco, coffee, and sugar.

# PRESENTATION OF PAN AMERICAN GOLD MEDAL TO ANDREW CARNEGIE

MAY 5, 1911, will always be a date to be remembered in the annals of the Pan American Union, for then was presented to Mr. ANDREW CARNEGIE, by the Governing Board of the Pan American Union, the Pan American medal which was unanimously voted him by the official delegates of the 21 American Republics attending the Fourth International Conference of American States, held at Buenos Aires, in July and August of 1910. The resolution providing for this gift was as follows:

RESOLUTION (Aug. 4, 1910).

[Tribute to Mr. Andrew Carnegie.]

The Fourth International American Conference, assembled at Buenos Aires, resolves:

First. The Fourth International American Conference declares that Mr. ANDREW CARNEGIE deserves the gratitude of the American Republics.

Second. The Union of the American Republics, on behalf of the Governments therein represented, shall have a gold medal struck bearing these inscriptions in English: On the obverse "The American Republics to ANDREW CARNEGIE," and on the reverse "Benefactor of Humanity."

Third. That the medal referred to in article 2 hereof, together with a copy of this resolution and of the documents thereto relating, shall be presented to Mr. ANDREW CARNEGIE at a special session of the Governing Board of the Union.

In accordance with the instructions of this resolution, the Governing Board appointed a committee composed of the Ambassador of Mexico, the Minister of Costa Rica, the Minister of Venezuela, the Minister of Colombia, the Minister of Ecuador, and the Director General, to complete arrangements for the making and actual presentation of the medal.

After careful consideration of the different designs presented, the one submitted by Mrs. SALLY JAMES FARNHAM, who executed the bronze friezes in the Governing Board room of the Pan American Building, was selected. The casting and making was done by Tiffany & Co. The medal measures $3\frac{1}{2}$ inches in diameter and one-fourth of an inch in thickness. It weighs nearly a pound, containing 270 pennyweights of gold and is 22 carat fine. On one side it carries a

portrait of Mr. CARNEGIE, with the words "Benefactor of Humanity"; on the other is the dignified figure representing "All America," resting her left arm on the section of the globe which shows the Western Hemisphere and waving her right hand toward the Pan American Building, while around the border are the names of the 21 American Republics presenting the medal.

In view of the fact that the awarding of this medal to Mr. CARNEGIE by such a large group of nations was an unprecedented event in history, the Committee of the Governing Board invited the President of the United States, the Secretary of State of the United States, who is Chairman ex-officio of the Governing Board, the Mexican Ambassador, as well as Mr. CARNEGIE, to make addresses on the occasion of the presentation. The Right Rev. Mgr. WILLIAM T. RUSSELL, D. D., was asked to deliver the invocation and the Rev. ROLAND COTTON SMITH, D. D., pronounced the benediction.

The audience was one of the most notable that has ever assembled in the beautiful Hall of the Americas, numbering over 1,000, who filled every chair and occupied all the available standing room. Among those in attendance were members of the Diplomatic Corps, Supreme Court judges, Cabinet officers, Senators, Congressmen, and other officials and prominent representative men and women of the National Capital.

In a brief statement, Director General JOHN BARRETT opened the exercises and announced that following the invocation, Hon. PHILANDER C. KNOX, Secretary of State of the United States, would take charge of the meeting in his capacity as Chairman of the Governing Board.

The Right Rev. Mgr. WILLIAM T. RUSSELL, D. D., then delivered the following invocation:

O, Almighty and Eternal God, who reachest from end to end mightily, and orderest all things sweetly, whose reign is order, and whose rule is peace, grant, we humbly beseech Thee, that the nations of America which are united to-day to honor one who has been foremost in the counsels of peace, may learn to experience daily more and more the reward of Thy gracious promise: "Blessed are the peacemakers, for they shall be called the children of God." Direct our steps according to Thy word, and let no iniquity have dominion over us.

We pray Thee, O God of might, wisdom, and justice, through whom authority is rightly administered, laws are enacted, and judgment decreed, assist, with Thy Holy Spirit of counsel and fortitude, the Presidents of these American Republics, that their administration may be conducted in righteousness and be eminently useful to the people over whom they preside by encouraging due respect for virtue and religion, by a faithful execution of the laws in justice and mercy, and by restraining vice and immorality. Let the light of Thy divine wisdom direct the deliberations of their Congresses, and shine forth in all the proceedings and laws framed for their rule and government, so that they may tend to the preservation of international peace, the promotion of happiness, the increase of industry, sobriety, and useful knowledge, and may perpetuate to us all the blessings of equal liberty.



Photograph by Harris-Ewing.

ANDREW CARNEGIE ACCEPTING THE PAN AMERICAN MEDAL AT THE PRESENTATION EXERCISES, HELD IN THE HALL OF THE REPUBLICS, WASHINGTON, D. C., MAY 5, 1911.

The medal was unanimously voted him by resolution, August 4, 1910, passed by the Fourth International Conference of American States, assembled at Buenos Aires, during July and August, 1910.

Hon. PHILANDER C. KNOX, Secretary of State of the United States and Chairman ex-officio of the Governing Board, spoke as follows:

MR. PRESIDENT, LADIES, AND GENTLEMEN: Those who have gone beneath the surface for the purpose of understanding the events transpiring in the Western Hemisphere in the last few years and the forces by which they are directed appreciate that the last conference of American States held at Buenos Aires in the summer of 1910 was one of vast importance and significance. It was the fourth of these conferences, and it came at a period in the history of the Pan American movement when something more was required to prolong its life than the enthusiasm generated by eloquent words.

The delegates, representing the American Republics, gathered at Buenos Aires, sat down in the chamber of conference in a spirit of friendly respect for each other as the representatives of States of equal sovereignty and responsibility, and gave their attention to those matters of substantial concern through which the peoples of their respective countries feel, in their daily affairs, the effects, either good or bad, of the rules which regulate intercourse between nations by nature grouped for union, not political, but of aim and of cooperative effort for the fullest development, mutual benefit, and individual welfare of the American Republics.

The proceedings of the three earlier conferences, while more academic, were of value in bringing about the realization of the fact that all our countries could participate in debate and vote without any one Republic's fearing action which, even by implication, involved a lack of recognition of equal standing as a sovereign State.

The large advance made throughout the Western Hemisphere within the past few years in removing causes of irritation between different countries, many of which were of long standing, and in bringing about a just recognition of the responsibility of sovereign power enabled the conference to undertake practical matters without anyone's raising a note of alarm, although the departure from the academic was radical and would have been impossible at former conferences.

As peace between nations is best promoted by just rules regulating their reciprocal dealings the Conference gave its attention to approved procedure in actions connected with pecuniary claims, acceptance and recommendation of uniformity in consular documents, protection of patents and trade-marks, cooperation in sanitary measures and education, and an outlining of international conditions under which commercial communications and factors may be under the control and regulation of the American States.

The atmosphere in which such real things as these I have cited could be considered was just the atmosphere to develop a realization of the full scope of the character and possibilities of the organization and the instrumentalities through which it worked. Whereupon the Fourth International Conference of American States resolved, in order to acknowledge the dignity which it is proper to recognize in an international institution of such importance, that the name of the Bureau of American Republics for which this structure was built should be changed to Pan American Union, while the name of the organization of American countries which supported the Bureau was changed to "Union of American Republics."

The organization, therefore, housed in this beautiful temple is now the Pan American Union. Those who conceived its dignified and beautiful lines and ample proportions must have surveyed with prophetic eye its expanding field of usefulness made possible by the closer associations and better understandings between the countries it represents.

The significance of this new atmosphere expressed by the adoption of the word "Union" presages fuller realization of the unity of aim and of effort wherein lies the greatest material and political strength of the 21 Republics whose heritage is so wonderful. It is even more important that ours be a "Union" of magnanimous and lofty Pan-American public opinion, doing justice and exacting justice, disdaining ignoble




THE PAN AMERICAN GOLD MEDAL—EXACT SIZE.

The medal, designed by Mrs. Sally James Farnham, was cast and made by Tiffany & Co., of New York. It measures 3½ inches in diameter, ¼ of an inch in thickness, and contains 270 penyweights of gold, 22 carat fine.

suspicion, and putting to scorn international acts of unworthiness when found among us.

The deep debt of gratitude entertained by the American Republics toward Andrew Carnegie, the American citizen in whose heart was found the desire and in whose purse lay the ability to be the donor of this building, found expression in a direction that he be presented with a gold medal upon which the American Republics were to declare him to be the benefactor of humanity. For that purpose I have now the honor of presenting his excellency the Mexican ambassador.

His Excellency Sr. Don MANUEL DE ZAMACONA É INCLÁN, the Ambassador of Mexico, then delivered the address of presentation:

MR. PRESIDENT, MR. CHAIRMAN, YOUR EXCELLENCIES, LADIES AND GENTLEMEN: As chairman of the special committee appointed by the Board of the Pan American Union, and in accordance with the resolutions passed at the Fourth Pan American Conference, held last year at Buenos Aires, it is my privilege, and I appreciate it very highly, to address a few words to this distinguished assembly on the presentation of a medal, which is a testimonial of gratitude from the American Republics to the great apostle of peace, Mr. ANDREW CARNEGIE.

Mr. CARNEGIE'S efforts to promote the welfare of humanity are known throughout the world, yet I hope I may be permitted to refer briefly to some of the characteristics of this noble work.

The "peace fund" created by Mr. CARNEGIE, with unprecedented liberality, aims, as you are all aware, at the suppression of war and at the solution by rational means of all international difficulties. This endowment, with ample resources at its disposal, will undoubtedly facilitate the study, propaganda, and action that may be necessary in the furtherance of universal lawfulness. Repeating the words of a great statesman, universal lawfulness, that is to say, the respect of the rights of others, implies the attainment of universal peace and the realization of the biblical prophecy of happiness and prosperity, for the lion shall lie down with the lamb, the swords shall be beaten into plowshares and the spears into pruning hooks.

A "hero fund" has also been created by the same generous benefactor for the heroes that do not kill, for the heroes that respect human rights and human interests, for the true heroes that alleviate human suffering in the civil and peaceful walks of life. The "hero fund" tends to exalt altruism and self-sacrifice, without vainglory, and to condemn that secular error that even to our days persists in claiming that a hero should always be clothed in the garb of war, thus surrounding war, the greatest calamity that can afflict the human race, with a misleading halo of false prestige and glory.

Mr. CARNEGIE, not satisfied with these most liberal endowments, and with others that he has made and that are too numerous to mention in my speech, has also donated the building where we are now assembled, to serve as headquarters of the Pan American Union—the Peace Court Building in Central America, and the sumptuous Palace at the Hague, where war is being substituted, more and more every day, by the judicial procedure of international arbitration.

Long may these palatial structures stand as monuments to the memory of their generous donor, and may the doctrine of peace, for which they have been created, radiate from them for the happiness and welfare of mankind.

The cause of peace prospers most rapidly. An arbitration treaty has been signed at the City of Mexico and ratified by six Latin American Republics; in the United States peace and arbitration are the favorite topics of daily discussion and these are evident indications of the general aspirations for peace prevailing throughout the American continent.

It is only natural, therefore, that the Republics of America respond with gratitude to the generosity, and with enthusiasm to the high ideals of the great apostle of peace, Mr. ANDREW CARNEGIE.

By the unanimous vote of 21 nations, represented at the Fourth Pan American Conference held at Buenos Aires in 1910, this expression of sympathy and gratitude is conveyed in a medal which I have now the honor to present, on behalf of the American Republics, to *Andrew Carnegie, Benefactor of Humanity.*

In response to the presentation of the medal, Mr. CARNEGIE said:

MR. PRESIDENT, CHAIRMAN, AMBASSADORS AND MINISTERS OF OUR SISTER REPUBLICS AND OF OTHER NATIONS, LADIES AND GENTLEMEN: My entrance to public service was upon the invitation of President HARRISON, through Secretary of State BLAINE, the originator of the first Pan American Conference. I was a member of that body and sat for the first time among representatives of other lands. No wonder that it created an impression upon me which has increased with the years. No wonder that both head and heart have responded to the great work of drawing together all the Republics in bonds of peace and good will.

I was sitting at my desk in the Highlands of Scotland last autumn when a telegram was handed to me, which I opened and read without seeming quite to grasp the meaning of the words. I was stunned. Was I dreaming? "Could such things be and overcome us like a summer's cloud without our special wonder?" My hands went to my forehead and I bent my head to the desk. Slowly the truth developed and established itself and I began to realize what it all meant. The telegram told me of the action of the Pan American Conference at Buenos Aires awarding me this medal. Truly, my friends, I never before felt so completely overwhelmed and crushed as it dawned upon me that the honor which the conference had voted to confer was without parallel; 160 millions of people, forming 21 sovereign nations, bestowing upon poor me an honor the like of which had never before been bestowed upon a human being. Still ashamed to stand up, I felt as if I should like to sink into the ground, conscious that I could never have the audacity to accept it, but as days passed, HAMLET'S words came to me—"Treat the poor players not after their deserts, but after your own honor and dignity. The poorer their merits, the larger will be your bounty." I was indeed in the condition of the poor players. The Republics had followed HAMLET'S advice and treated me not after my deserts but after their own honor and dignity, and this thought resigned me to my fate. To-day as I stand before you and receive this medal of medals, which has no fellow, my first thoughts again begin to crowd upon me and I am again abashed. My friends, all I can promise you is that although I can never hope to feel that I have deserved such honor, I shall try my best so to live that your people who have thus exalted me beyond my deserts will never have cause to blush for any act of mine.

Mr. Chairman and Ambassadors of our sister Republics, addressing you in this hall a year ago, the President expressed how ardently our Republic longed for the reign of peace between the 21 sister Republics, stating "We 21 Republics can not afford to have any two or three of us quarrel." Thus, the President's first invitation to establish the reign of peace was very properly made to you. Much has taken place since then. He recently offered the olive branch of peace to any one strong nation, and it was instantly accepted by the other branch of our English-speaking race with such enthusiasm, not by one but by all parties, that to-day we have every reason to believe war as a means of settling disputes between the two branches of our race will soon become a crime of the past. May I, addressing through you your respective Governments, and returning thanks for the great honor conferred upon me this day, accompany these with the expression of the ardent wish of my heart that prompt action should now be taken by the 21 Republics to establish the reign of peace among ourselves by adopting our President's policy of submitting all disputes to arbitration. As the words spoken by me in the first American conference expressed this desire, so my last words to you, gentlemen, representing your respective countries, are the same. May the sister Republics become sisters indeed, members, as it were, of one peaceful family, resolved

to allow no dispute, should such arise, to endanger their peaceful relations. Perhaps, when the foremost and most successful apostle of peace has concluded his first compact of peace, abolishing war within the wide boundaries of our English-speaking race, he will next turn again to our sister Republics, begging them to draw closer to each other, and by suitable treaties covering all disputes render it impossible that our sisterly, peaceful relations can ever again be disturbed. My earnest prayer and hope is that my life may be spared until I see us all participating and rejoicing in each other's prosperity, united in the bonds of everlasting peace and good will.

Mr. President, I can not close without at least attempting to express my deep sense of the great honor conferred upon me and mine by your august presence to-day.

President TAFT then spoke as follows:

Mr. CHAIRMAN, Mr. CARNEGIE, REPRESENTATIVES OF THE AMERICAN REPUBLICS, LADIES AND GENTLEMEN: I wish to express my full concurrence in the strong words of the Secretary of State emphasizing the importance of the last meeting of the American Republics at Buenos Aires, and in calling attention to the future usefulness of the Union, there made firmer, of all the Republics of this Hemisphere. What can be built on that Union, and what can be made out of it, no one can say; but that it may be made the basis for the settlement of all possible disputes between those Republics everyone may properly hope.

We meet here to-day to take part in the ceremony of the presentation, by the Union of those Republics, of the "Pan American Gold Medal" to the individual, foremost in the world in his energetic action for the promotion of peace. We are all glad to take part in it. The immediate cause was the presentation to that Union of this beautiful temple of peace. Except for the fact that he has been prominent for years in the general peace movement, it is possible that the Union would not have thought that an expression so notable as this should be made to show their appreciation of his position in the world and his advocacy of the prosperity and peace of all the Republics. Nevertheless, the erection of this building is a most important step. It has a typical significance that makes greatly for the bond established between those Republics. No patriotic American comes to Washington and walks under the dome of the Capitol that he does not feel that in some way or other he is there standing close to, and in the presence of, the United States as a personality. And so I hope that no representative of any of the Republics comes into this beautiful chamber and under this roof without thinking of it as an expression of the bond that binds those Republics. Hence, it is that this building and its erection and its donation by the generosity of ANDREW CARNEGIE are a proper occasion for those Republics to express to him, as an exponent of peace the world over, their feeling of gratitude for what he has done to make alive that bond.

The exercises were brought to a close with the benediction pronounced by Rev. ROLAND COTTON SMITH, D. D.

May God who hath made of one equality all nations of the world, establish law and justice and peace upon the earth. May the blessing of God the Father, the Son, and the Holy Spirit be upon this brotherhood of nations now and forevermore. Amen.

# THE BANANA AND ITS RELATIVES[a]

IF YOU did not eat three dozen bananas last year, you did not have your share. Over 40,000,000 bunches, or more than 3,000,000,000 bananas, were imported into the United States in 1910. The immensity of this shipment can be more readily grasped by the statement that it would cover an area 20 feet wide, reaching from New York to San Francisco, or, placed end to end, would extend thirteen times around the earth at the Equator. The "slip" in the peels would launch the ships of the world. The wholesale value of the 1910 importation, at point of export, was over $12,500,000, while in all probability the consuming public of the United States expended over $35,000,000 for this delectable fruit.

During the past ten years the number of bananas consumed in the United States has more than doubled, and the increased tropical acreage under cultivation assures even more startling figures for the next decade. Many European countries are importing large quantities of bananas; last year Great Britain consumed over $8,000,000 worth, Germany, over $1,000,000, and France, $500,000.

With the world's decreasing food supply, and the wheat crop at a standstill, the banana comes forward as an important factor in saving the day. One acre with little labor will annually produce 17,000 pounds of bananas, or more than one and one-third times as much food substance as an acre of corn, two and one-third times as much as oats, almost three times as much per acre as wheat and potatoes, and four times as much as rye. The chemical composition of bananas and potatoes is almost identical.

Forty years ago there were very few people in this country who could boast of having seen a bunch of bananas. The fruit was practically unknown. Now, in even the most remote country store, this "pride of the Tropics" is a familiar sight.

Despite the fact that millions of bunches annually are consumed, they belong almost wholly to one member of the family, the common yellow Guineo.

Scientists have recognized and classified as many as 40 different species, ranging from the ornamental groups that do not develop fruit, to the giant bananas, the Plátano of the Spaniards.

The red banana is not common in the American markets. "There is a reason." In the United States it is used only to "dress" fancy baskets of fruit, but in the tropical countries it is quite a favorite.

[a] By Franklin Adams, Editor of the Bulletin.



Photograph by Underwood & Underwood

SCENE ON LARGE BANANA PLANTATION NEAR PUERTO LIMON, COSTA RICA.

Houses in middle background are dwellings of superintendent and laborers. Average yield of bananas per acre is 17,000 pounds, more than one and one-third times as much food substance as an acre of corn, two and one-third times as much as oats, almost three times as much per acre as wheat and potatoes, and four times as much as rye.

The individual banana is large, but the stalk does not carry as many "hands" as the yellow varieties, so as it does not bring as large a price to the grower and wholesaler, its extensive cultivation is not encouraged.

Banana culture is one of the oldest of industries. It has been known since the origin of the human race. Long before the dawn of history in the Old World, perhaps long before the Old World rose from the waters, man lived on the fruit of the *Musas*. The banana was generally considered a native of southern Asia, and to have been carried into America by Europeans, until HUMBOLDT threw doubt upon its purely Asiatic origin, quoting early authors who asserted that the banana was cultivated in America long before the Conquest. It is claimed that at the time of the Incas in Peru, bananas formed one of the staple foods of the natives of the warm and temperate regions of the Montaña. In spite of the uncertainty as to just which country may claim the fruit as indigenous, all tropical lands assert their right to it.

The first importation of bananas to the United States occurred in 1804, when the schooner *Reynard*, on a voyage from Cuba, brought into New York, as a commercial venture, a consignment of 30 bunches; but the real beginning of the trade dates back to 1866, when Mr. CHARLES FRANK undertook the importation of fruit from Colon to New York. Previous to that venture small cargoes consisting mainly of the red banana had been received at irregular intervals from Cuba. In 1870, Captain BAKER, an owner of a Cape Cod schooner, took a charter to carry gold miners and machinery 300 miles up the Orinoco River in Venezuela. After discharging his cargo, Captain BAKER ran into Jamaica to secure some cocoanuts as ballast to New York, carrying a few bunches of bananas on the deck as an experiment. The result promised a great future for the industry on that island, which has been fulfilled, the exports last year reaching $4,000,000.

On the American continent, bananas are successfully grown through 50° of latitude, from Tampico, Mexico, 25° north, to Asuncion in Paraguay, in the Tropic of Capricorn, 25° south—a belt over 3,000 miles in width. Cultivation of the fruit is practically restricted to the eastern coast line, for the banana is one of the thirstiest of plants, and can not be expected to produce its maximum amount of fruit in districts where there are less than 100 inches of annual rainfall. Unfortunately for humanity, great areas of the land lying within this belt are high, dry, and sterile, while others are sandy or rocky, so only a small fraction is so located that banana growing can be made profitable. The altitude must not invite danger of frost, and high temperature is necessary for the growth. The southern coast of the Mexican Gulf, the Puerto Barrios section of Guatemala, the Puerto Cortes district of Honduras, the Puerto Limon district of Costa Rica,



TYPICAL BANANA PLANTATION.

The banana has a curious and prodigal method of propagation, for before the parent stalk and fruit have matured new ones spring up. These are offshoots that grow from the root of the original planting, resembling the sprouts from the "eyes" of a potato, and each in turn becomes a parent stalk with its fruit.

the Bluefields district of Nicaragua, the Bocas del Torro region of Panama, the Colombian province of Santa Marta, and certain portions of Cuba, Jamaica, the Dominican Republic, Haiti, and Dutch Guiana, all combine the favored elements of soil and climate.

The plant has two natural enemies—the gopher and the wind storm—but against almost all other tropical conditions its hardihood is remarkable. It is practically immune from insect pests, and a worm-eaten banana or the stalk of a bunch practically destroyed by any of the boring insects of the Tropics is unknown. The damage from high winds can be avoided or minimized either by planting in locations protected from storms or by leaving unfelled strips of native forest as protective screens. Where the gopher interferes, it can be fought by the use of carbon bisulphite. There is, however, a "witch broom" disease which has affected the Gros Michel variety in Dutch Guiana, and a "Panama" sickness which has attacked certain other varieties.

It is a matter of common observation that the banana is absolutely seedless, cultivation through innumerable generations having led to a vegetable method of propagation. Some of the primitive seed-bearing varieties are still said to exist in isolated regions of the Far East.

The first step toward cultivation is the clearing of the land. Into the tangle of shrubs and vines and the thick snarl of tropical vegetation the laborer comes with an ax and "machete" and cuts low everything but the giant trees. When all of the small timber and brush has been felled planting is commenced.

Young shoots are obtained from a plantation already in bearing, and these are placed in rows about 12 feet apart. When the planting is finished, the only labor necessary is to keep down the weeds and carefully clean the ground about the root of each stalk.

The banana plant will grow with wonderful rapidity under favorable circumstances. In fact, the development from a newly planted sucker to the plant in full bearing is simply short of marvelous. Within a space of six or seven weeks the 2 or 3 foot plant has more than doubled in size, and a month or so later the leaves cease to unfold and a spike appears out of the center of the crown. This is the future stalk of the bunch and carries a huge red blossom at the end. It develops rapidly, continually bending more and more until in a short time it has turned completely upon itself, so that the bananas grow end up or in a position the reverse of which they are usually hung. From 7 to 12 months after the blossom appears the fruit is ready for the gatherer. At irregular intervals along the entire stalk, and only extending part of the way round at any one place, the bracts break forth tiny ridges of flowers—which are almost immediately replaced by 9 to 12 embryo bananas. These are the future "hands" of the bunch, so called on account of their resemblance to those members when held in a certain position.



A BANANA PLANTATION IN THE DOMINICAN REPUBLIC.

The cultivation of bananas in the Dominican Republic has greatly increased during the past 15 years, the value of the exports to the United States having risen from $16,470 in 1895 to $288,647 in 1910. The raising of bananas is one of the chief agricultural industries of the island, the soil, climate, and atmospheric conditions being particularly adapted to its culture.

It is by means of these hands that the fruit is classified for shipping. A bunch of 9 hands or over (the average being 10 to 12) constitutes a "first;" between 7 and 9, a "second." Anything under this minimum is discarded by an inspector at the wharf. Bunches of 17 hands are exceptional, and those of this abnormal size are usually not shipped, owing to the inconvenience of storing in the steamer's hold.

The banana has a curious and prodigal method of propagation, for before the parent stalk and fruit have matured new ones spring up. These are offshoots that grow from the root of the original planting, resembling the sprouts from the "eyes" of a potato, and each in turn becomes a parent stalk with its fruit. It follows that unless most of the continually appearing new plants are cut out (which is the practice) the first stalk in a few years will become the center of a minature jungle. The plants grow to a height of from 15 to 35 feet, spreading in all directions, until the soil is overburdened with an enormous mass of stalk and leaf growth, and stunted fruit is produced.

In cultivation, four suckers (which is another name for the shoots) are usually allowed to grow in one hill, and their graduation is so arranged that while the oldest is bearing fruit the next is in blossom, the third is half grown, and the last is just coming forth from the ground. The banana plantation yields a continuous harvest for years without replanting. Some that are fifty years old are yielding to-day as prolifically as in their third or fourth year, but these are located in exceptionally fertile districts. The rotation of crops is unknown, and unless the land is subject to overflow it can hardly be profitable after ten years' working.

In planting for the market about 200 hills are allowed to the acre. Sometimes the number can be safely increased to 225, in which case there will be 900 stalks. However, after one year all of these stalks do not produce a marketable bunch of bananas, and the average yield is not over 300 full bunches to the acre per annum.

Perry, the well-known authority on bananas, estimates that a grower can produce a bunch for from 10 to 15 cents, which will have a market value of 30 cents. The cost of producing after the first crop is confined to cultivating and harvesting, which may be done for from $10 to $20 per acre yearly. The net profit, however, averages about $50 per acre in the various banana producing sections. The banana often grows in combination with other products. In some cases it is used as a shade for young coffee plants.

A great many people are of the opinion that the banana would be much better if it was allowed to ripen on the plant, but this is not the case. Such fruit is strong in flavor, does not mature to perfection, and the skin breaks, attracting numerous insects, while the weight of the bunch itself becomes too great for the plant, either one or both coming to the ground. The bunches are cut when the fruit is one-

half to three-quarters matured, though still green and as hard as nails. It continues to feed from the cut stalk, which contains a great amount of sap, until fully ripe. Should the cutting occur too soon, however, the fruit, although turning yellow, will never attain the perfect flavor.

With the cutting of the bunch ends the life of the plant, for it bears but once and is usually cut down to obtain the fruit, or succumbs a few days later to the cleaning process, which is merely the bringing of a spent piece to the ground. Cutting the fruit itself involves the only careful labor on the banana plantation, as the



A banana stalk as it looked when freshly cut at 10 a. m. Same stalk showing the growth in the center 20 minutes later.

PHOTOGRAPHS ILLUSTRATING THE RAPID GROWTH OF THE BANANA PLANT.

It would seem that a motion picture camera would almost be necessary to record the seeming incredible growth. The accompanying photographs serve to illustrate the manner and rapidity with which the banana sets about to overcome an injury which to other vegetable life would prove fatal. The great rapidity of growth is due to the spirally wrapped leaves that are contained within the banana stalk and are merely pushed upward and unrolled instead of developing from a bud.

bunches weigh from 50 to 60 pounds, and even slight knocks are followed by bruised spots, under which the fruit quickly ripens and decays. However, by the liberal use of dried banana leaves the fruit is safely brought to the railroads.

Bananas grown for the market are planted, as a rule, on the border of navigable waters having easy access to harbors. The large purchasing companies make a general rule that the bananas must be placed by the grower in cargo lots alongside the steamers that draw from 12 to 15 feet. Often to meet this condition the fruit is sent

down the rivers in barges to the waiting vessels. In the more important banana-producing countries, as in Costa Rica, most extensive railway systems have been introduced to facilitate the shipping of the fruit. These plantations line the railroads for 50 miles from Port Limon. In Panama steam and gasoline launches bring the bananas alongside the steamers. Some parts of Nicaragua, such as Bluefields, are exceptionally favored for banana growing on account of the unobstructed rivers, into which the ocean-going steamers may navigate for 50 miles.

Plantations are divided into sections or zones of about 10 to 20 miles in length, and the zones are "cut" in rotation, thereby cleaning



Stalk 8 hours after cutting. Identical stalk 31 hours after cutting.

up the available supply of fruit in one or several sections while it is maturing in others.

Up to the year 1898 at least a dozen companies were importing and exporting bananas. When rival steamers happened to reach a tropical port together the bidding for the fruit resulted at times in the paying of high prices, but later on the competing importers combined to secure the fruit at low prices.

In 1899 banana trading was organized on modern commercial lines. Over 125 vessels have since been especially built for this trade and are plying between American ports and the tropical fruit belt. Wireless telegraph stations along the Central American coast keep in



INSPECTOR AND PICKING-UP GANG.

Following the cutters come the picking-up gangs, who deliver the fruit at the receiving platforms along the railroad track. An inspector watches the fruit as it is passed into the cars. ¶ He counts and grades each bunch, rejecting those that show signs of ripening and those that are undersized or bruised.

touch with the banana fleet that is moving in a steady procession up and down the Caribbean.

In Costa Rica the system which has been evolved for handling the fruit from the time it is cut from the plant until it is placed on the dealer's little stand in the far interior cities of the United States is indeed marvelous.

When a steamer starts from a United States port to secure its cargo a cable is sent advising of the departure, so that preparations can be made for cutting the crop. The carrying capacity of the vessel is known almost to a bunch. Each plantation manager furnishes at the beginning of the week an estimate of the amount of fruit he can cut, and one, two, or three sections may be called upon, accord-



PLANTAIN FOREST IN NICARAGUA.

The *platano*, known to the English-speaking world as the plantain, is the largest member of the banana family. Baked, boiled, or fried, it holds an important rôle in the menu of the tropical world.

ing to the size of the ship and the quantity of fruit available in each section. About thirty-six hours previous to the expected arrival of the steamship orders are sent to the plantations, notifying them to cut fruit for delivery on a specified date. The day before the steamer is due trains are made up and sent out to pick up the fruit, these trains being so timed that steamers will not be delayed waiting for cargo.

On the morning of the cutting, the plantation is all astir. First out are the "cutters," who go up and down the long avenues of banana plants, closely inspecting each hanging bunch. In cutting the fruit long lances are used, palm poles armed with broad steel blades. The stalk of the tall plant is half severed at a point about 8 feet above the ground. The weight of the fruit causes the top of the plant to

bend slowly to the earth, where the bunch is cut from the stem by a stroke of the machete. Following the cutters come the picking-up gangs, who deliver the fruit at the receiving platforms along the railroad track. An inspector watches the fruit as it is passed into the cars. He counts and grades each bunch, rejecting those that show signs of ripening and those that are undersized or bruised.

It is not unusual for a snake to find lodging in a bunch of bananas, but when discovered at the loading point "Snake in this car" is usually chalked on the outside, and the carriers handle the bunches very gingerly at the wharf.



CUTTING BANANAS IN COSTA RICA.

In cutting the fruit plant, long lances are used—palm poles armed with broad steel blades. The stalk of the tall plant is half severed at a point about 8 feet above the ground. The weight of the fruit causes the top of the plant to bend slowly to the earth, where the bunch is cut from the stem by a stroke of the machete.

The loaded train is rushed to the port where the steamer is waiting for the cargo. Steam conveyers reach from the open hatchway to the doors of the fruit cars, permitting a cargo of 20,000 bunches to be loaded and stowed in less than ten hours. Day in and day out during the voyage the fruit is closely inspected, wind sails and ventilating fans being used to maintain the proper temperature.

The selling agents and fruit brokers of the importing companies are advised just when the cargo is expected. Very often the entire shipment is sold before the vessel reaches port.

For many years the fruit was sold to dealers by the bunch, but this was found unsatisfactory, owing to the variation in size and quality.



Photograph by Underwood & Underwood.

LOADING BANANAS IN PANAMA.

Bananas are placed in canoes at Gatun, on the Chagres River, in the Canal Zone, for shipment.

For the past six years the fruit has been sold to the wholesalers by the hundredweight, although the old classification is used to distinguish the grades.

When a vessel arrives at an American fruit wharf, it is scarcely made fast before the work of discharging the cargo to the ventilated cars commences. Every bunch is recounted, regraded, and reinspected. Fruit that shows signs of ripening is reserved for near-by markets. Fully ripe fruit is sold to dealers and peddlers in the city. In a few hours the shipment has been discharged and cleaned up.

After cargoes are discharged in the United States, solid trains of banana cars run as "specials" every day in the week from New York, Baltimore, and New Orleans to all of the large cities of the country. Carloads are even shipped to Calgary, Canada, over 2,000 miles from New Orleans.

The front ventilators of the forward cars of these trains, and the rear ventilators of the last cars, are connected by means of canvas tubes run into a main trunk chute. A powerful exhaust draws off the heat thrown out by the fruit in its ripening process, and the fans circulate cold air through every car in the train. During the winter months the operation is reversed, and fruit in transit during very cold weather is warmed while proceeding to its destination.

Each banana train leaving the seaboard for the interior carries a special fruit messenger, whose duty is to regulate the temperature of the cars, keeping them cool in summer, and in winter raising the temperature in order to avoid chilling the sensitive tropical fruit. Ventilating sheds have been built at terminal points.

The importance of banana traffic to the railroads may be estimated when it is considered that last year there were distributed throughout the United States and Canada over 60,000 cars, each containing 500 bunches.

To the average northerner, the banana is but a fruit seldom eaten in any other manner than raw, but in the Tropics it is often baked or fried, forming a most palatable food.

Banana flour makes very acceptable cake and bread. The flour is prepared by cutting the banana in pieces, drying and then grinding. It is difficult to make the flour where the climate is both warm and moist, but there are many elevated and comparatively dry places, near rich lowlands, where the fruit may be dried and ground, and thus preserved for long-distance shipment. Extensive banana-flour factories will ultimately be established in the principal banana-growing sections where the undersized fruit will be converted into flour, or perhaps into some new and delicious breakfast food. "Banana flakes" may soon be with us.

When the bananas are placed in an inclosed barrel and allowed to ferment, they will produce an excellent vinegar. From the ripe fruit a delicious cordial is made. Banana sugar is made in Jamaica



Photograph by Underwood & Underwood.

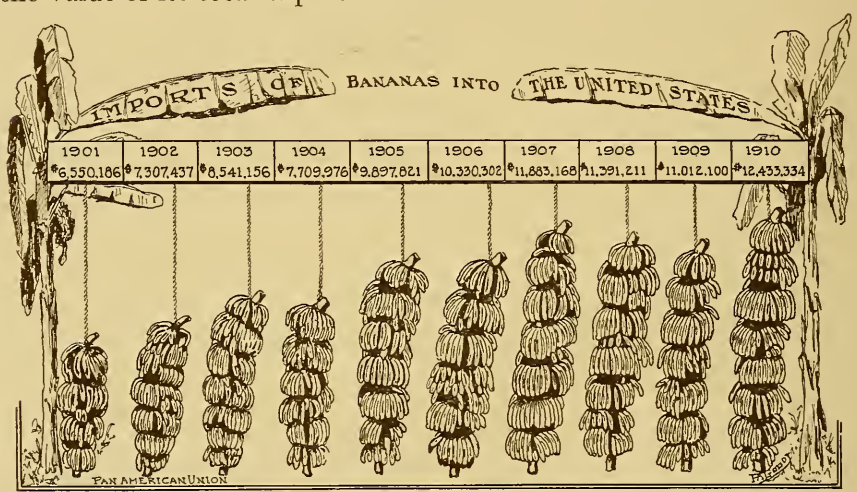
LOADING BANANAS ON A STEAMER IN THE WEST INDIES.

In Costa Rica steam conveyers reach from the open hatchway to the doors of the fruit cars, permitting a cargo of 20,000 bunches to be loaded and stowed in less than 10 hours.

and banana coffee in British Guiana. Dried ripe bananas are superior to figs, for when split into four slices and thickly covered with powdered sugar and exposed to the sun, they turn to a jelly-like confection. Dried bananas weigh approximately only one-ninth as much as the bunches, and have a same percentage of reduction as to space. This fact alone would save a large amount of the cost in transportation and the cold storage of fresh fruit. Heavily compressed in a small space they would make an ideal ration for soldiers and travelers on long inland tours.

Banana oil, which is used for applying bronzes and aluminum paints, is a misnomer, for while it has the odor of banana, the fruit does not in any way enter into its manufacture.

Costa Rica is the greatest producer of bananas, sending forth to the world over $4,500,000 worth of the fruit, practically one-half of the value of its total export trade.



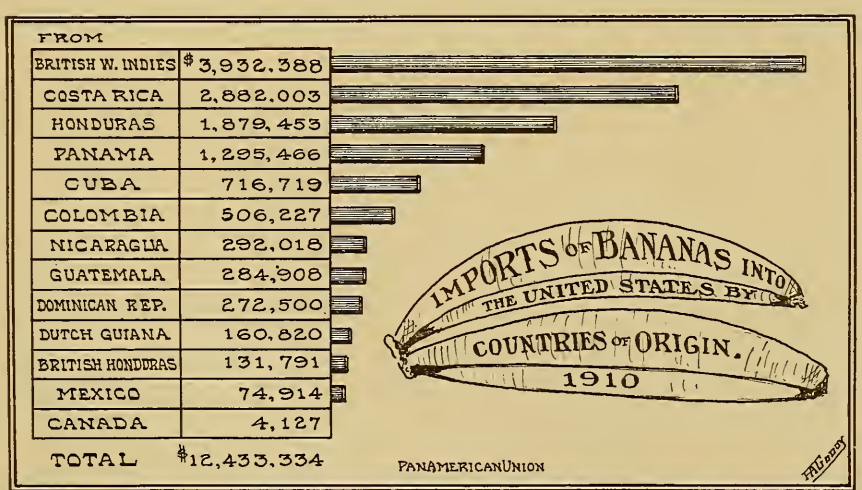

In Mexico the banana industry is quite important in the Isthmus of Tehuantepec. On the west coast, near San Blas, is a plantation which ships fruit to San Francisco. From the Gulf of Mexico southward the banana industry is steadily developing. The climate of southern Mexico is admirably suited to the banana, and this region, furthermore, has several rivers which assure water transportation to fruit that may be grown along their banks. Already there are steamers running from Galveston to Mexican ports for banana cargoes, and in addition to the plantations now engaged in the export trade, others are in process of development. The cost of banana land in the Republic is from $10 to $15 an acre, and it can be cleared and made ready for planting for about $40 or $50 additional.

There was a reduction of the banana crop in Jamaica in 1910, due to storms and excessive rains. However, 10,000,000 bunches were shipped to the United States from Port Antonio, on the north coast of the island.

Brazil in the last few years has given considerable attention to banana culture. In 1909 over 500,000 bunches were shipped to Argentina.

Bananas grown in Paraguay are shipped by fast river steamers to the markets of the River Plate.

A great many varieties of bananas, as well as plantains, have been grown in Dutch Guiana for local consumption during the centuries, but cultivation for export was not started until 1906. The year previous the Government of Holland resolved to come to the aid of the suffering planters of the colony in checking the serious diseases which destroyed the flourishing cacao plantations, advancing necessary funds for the new enterprise. The Colonial Government guaranteed the planting of 7,000 acres of bananas within three years, and contracted for the sale of the crop. On the 1st of April, 1909, 40 plantations, amounting to 7,000 acres, were contracted for. Four steamers,




Import figures furnished by the U. S. Bureau of Statistics.

especially built for the transport of bananas, were inaugurated in 1908. In 1910, 650,000 bunches were exported. Owing to the sickness which attacked the variety of banana under cultivation, a change was made to the Kongo banana, which can be raised, it is believed, without difficulty.

There is quite a large variety of the plátano, known to the English-speaking world as the plantain. This is the largest member of the entire Musa species, and is a giant among bananas, some measuring 15 inches in length and from 2 to 3 inches in diameter.

It is indeed surprising that the plantain has not made its commercial appearance in the American markets. It is firm in flesh, resisting decay much longer than the banana, and will therefore better bear transportation. It should become known to the dwellers in temperate lands, as it would afford a vast supply of food, cheaper and much more convenient and palatable than the potato.

The plantain is the most fit of the family to be cooked. Either boiled, baked, or fried it holds an important rôle in the daily menu of the tropical world. It can be reduced to a meal, which has an agreeable odor resembling the orris root.

In the Dominican Republic plantain meal has come into general use. The plantain is gathered when green, is peeled and sliced and put out to cure. After three days in the tropical sun it becomes dry and hard, and it is then pounded in a wooden mortar, the result being a rich creamy meal. It is generally served as a porridge and is very palatable.

A relative of the edible banana is the *musa textilis*, a native of the Philippine Islands, which produces the most valuable of all fibers for cordage, and is called locally the *abaca*. It resembles the banana very much in appearance. In its native regions the plant is cultivated solely as a source of fiber, the finer qualities being woven into fabrics suitable for wearing apparel. The value of the Philippine hemp cordage exported during the past year amounted to $17,500,000.

Taken altogether, the *musa* family is a most important one. It is not at all unlikely that in the future it will not only supply the high-grade cordage of the world and a still greater portion of sustenance for the hungry of the earth, but that its leaves and stalks, now wasted, will become a substitute for the fast decreasing wood pulp for use in paper making. Who can deny it the title of "Treasure of the Tropics?"



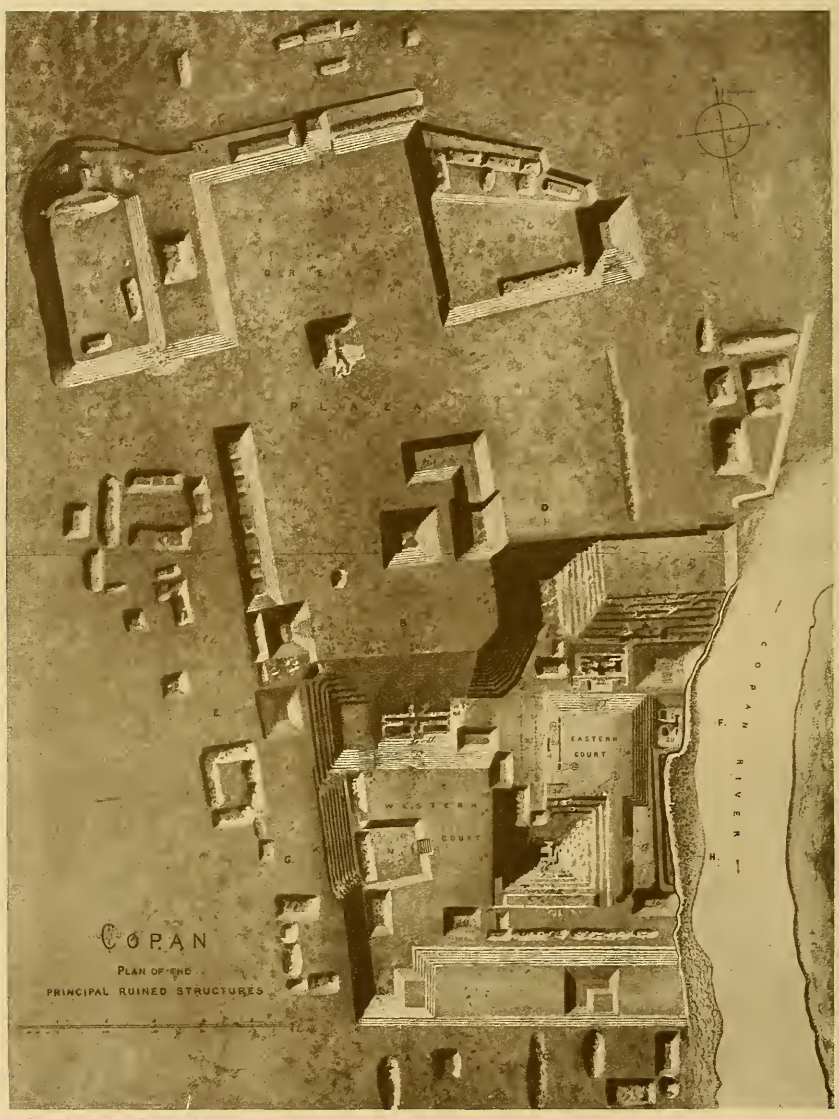
# ANCIENT TEMPLES AND CITIES OF THE NEW WORLD[a]

## COPAN, THE MOTHER CITY OF THE MAYAS.

THE preceding articles in this series have dealt with the northernmost sites of the Maya civilization, the cities of Chichen Itza and Uxmal, which are located in the northern part of the peninsula of Yucatan. Copan, on the other hand, the next to be described, is at the extreme southern end of the Maya area fully 400 miles farther south than the two places above mentioned.

The ruins of Copan are situated in the Valley of the Copan River in the western part of the Republic of Honduras only a few miles from the boundary of Guatemala. Mountains, the foothills of the Cordillera, reaching an altitude of some 2,500 feet, surround it on every side, their lower slopes overgrown with a well-nigh impenetrable thicket of low trees and bushes, and their summits sparsely covered with pine. The valley at this point is about a mile and a half wide, and it is upon this rich river plain that the ancient Maya metropolis was built. The river here flows east and west, now skirting the northern foothills, and again having crossed the plain, rushing along the base of the southern slopes, a modest stream, easily forded in the dry season, but a raging swollen torrent frequently overflowing its banks after the rains have set in. This pleasant valley surrounded on all sides by mountains of considerable height, supplied with an abundance of never-failing streams, and renowned for its fertility, offers a striking contrast to the parched waterless plains of northern Yucatan, which form the general environment of the northern Maya sites. With the former the water supply was never a question of moment, but with the latter its satisfactory solution in a few places only, absolutely determined the distribution of the aboriginal population. And yet, unlike as these two regions are, the Maya civilization, which overspread both of them, was of sufficient homogeneity, as we shall see, to follow in each one much the same lines of cultural development.

[a] By Sylvanus G. Morely.

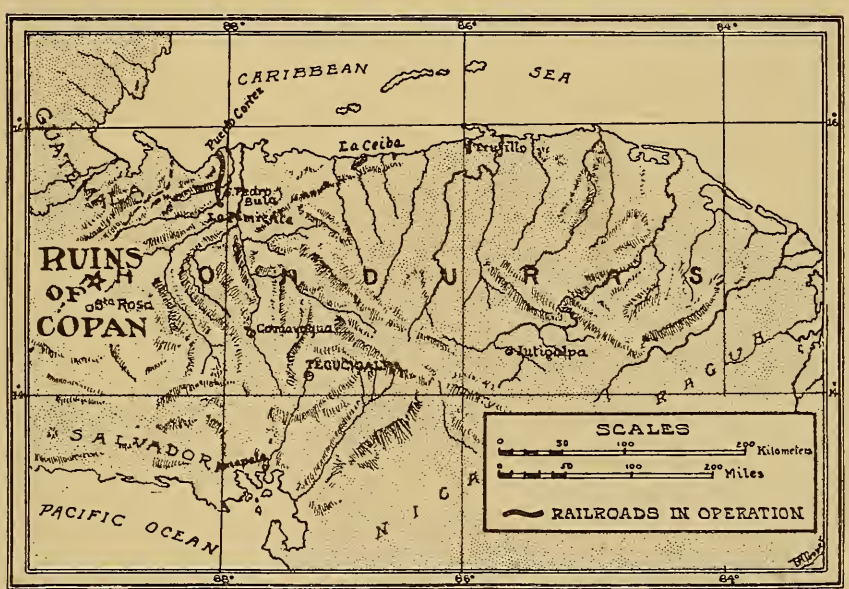



Drawing by A. P. Maudslay.

PLAN OF RUINED STRUCTURES AT COPAN.

Copan, the mother city of the Mayas, is sometimes called the City of Idols because it abounds with monolithic statues of Indian deities. The remains of a vast temple, or collection of sacred edifices, lie scattered about, together with innumerable fragments of mutilated ornaments and statues.

At the very beginning of our study of Copan we find ourselves confronted with a grave difficulty, namely, the entire absence of aboriginal tradition concerning the place, which consequently renders a reconstruction of the historical background impossible. In Yucatan, as we have seen, we were able to piece together somewhat of the early history of the principal cities, such as Chichen Itza, and Uxmal, from the account of native as well as Spanish writers, many of whom derived their information from those well acquainted with the former history of the country. And while this information is often quite fragmentary, nevertheless it sheds a very considerable light on the pre-Columbian history of these two northern sites, and in a measure, at least, dispels that darkness and obscurity which so completely enshrouds almost all the other great centers of the Maya culture.




MAP OF HONDURAS SHOWING LOCATION OF THE RUINS OF COPAN.

Concerning the former history of Copan, however, we know absolutely nothing, excepting the tradition of very doubtful value given below. In 1576, or thereabouts, Diego Garcia de Palacio, an official of the Audencia of Guatemala, visited these ruins and later described them in a letter to Philip II, the then King of Spain. In this communication, after a description of the different buildings, he says he endeavored to ascertain who the former inhabitants of the city were:

I endeavored with all possible care to ascertain from the Indians, through the traditions derived from the ancients, what people lived here, or what they knew or had heard from their ancestors concerning them. But they had no books relating to their antiquities. nor do I believe that in all this district there is more than one,

which I possess. They say that in ancient times there came from Yucatan a great lord, who built these edifices, but that at the end of some years he returned to his native country, leaving them entirely deserted.

Unfortunately, the reliability of this tradition is disproved by too many different lines of evidence to permit our accepting it. In the first place, the structures of Copan are far too numerous and massive to have been built within the span of a single life; and its elaborately sculptured monuments are far too intricate to have been carved in one generation with the tools available. Had that "Great Lord from Yucatan" lived twice the allotted



(Photo by J. L. Nusbaum.)

MAIN STRUCTURE FROM EASTERN SIDE OF COPAN RIVER.

View showing underground walls of faced stone exposed by the undermining action of the river floods

three score years and ten, his life, even then, could not have embraced one-fourth of the period of building activity at Copan.

Again, as we shall see, the hieroglyphic inscriptions at Copan indicate that it was far older than any of the Yucatan sites, and that it probably had been abandoned many years before the rise of the great northern cities. Still another reason for doubting that Copan was colonized from Yucatan arises when we examine the historical data bearing on each. All the early writers, native as well as Spanish, with the exception of Palacio, above quoted, pass over the great southern metropolis in absolute silence; but when they come to describe Yucatan nearly all of them mention the

two largest of the ancient cities there, Chichen Itza and Uxmal, and in some instances even give brief outlines of their history.

This striking absence of tradition relating to such an extensive site as Copan can only indicate one thing—that its fall and subsequent desolation had outlived the memory of man even at the time of the Spanish Conquest in 1530; and a generation later, when PALACIO visited the place, it had been forgotten so long that he was unable to find out anything about its former history except the very dubious tradition given above.

The ruins are more easily reached to-day from Guatemala than from Honduras, in which latter Republic they are located. One



(Photo by A. P. Maudslay.)

RUINS IN THE GREAT PLAZA.

leaves the Guatemala Northern Railroad at Zacapa, and either by horseback or cart, journeys eastward for two days, stopping overnight at Jacotan. The actual distance traveled can not be more than 35 or 40 miles at the outside, but the road is so rough and winds through country so mountainous that it takes two days to reach the ruins after leaving the railroad. The modern village of Copan, where one can secure accommodations of a sort, is about three-quarters of a mile from the main group of ruins. It is built over a part of the site of the ancient city, and has two beautifully sculptured altars standing in the plaza under a large tree. Several other sculptural monuments are to be found in various pigsties and chicken



Drawing by Catherwood. 1844.

STONE AND IDOL.

Fronting the great Hieroglyphic Stairway stands one of the altars upon which were offered sacrifices to the idol towering above it. Four hideous heads of colossal size with enormous fangs and distended eyes form the decorative element of this stone.

yards throughout the village, and there is another group of two or three, a short distance to the northwest in the "campo santo" or burying ground.

Taking the path leading to the east from the village, a fifteen minutes' walk brings one to the entrance on the west side of the Great Plaza, the largest and doubtless the most important court in the city. This imposing area, some 300 feet long by 250 wide, is surrounded on three sides by a terrace 10 to 15 feet high. The interior sides of this are stepped so that standing in the center of the plaza the effect is that of a sunken court surrounded on all sides but one, with tiers of stone seats or benches. The southern or open



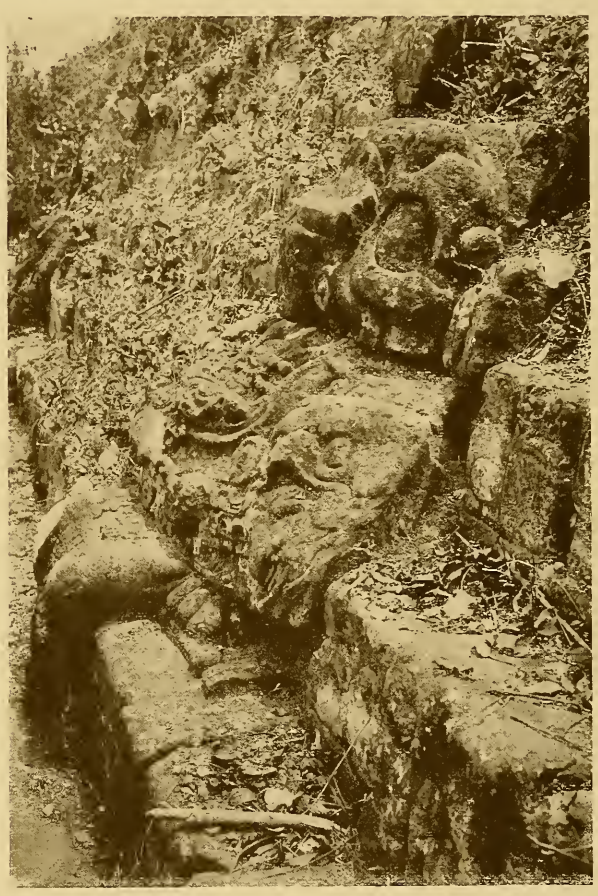
(Memoirs of Peabody Museum.)

HIEROGLYPHIC STAIRWAY AFTER EXCAVATION.

side is occupied by a small pyramid about 20 feet high, which, standing midway between the ends of the terrace, appears to inclose the area. This pyramid, because of its central position with reference to the Great Plaza, must have been a much more important structure than its size would now seem to indicate. Standing on its summit and looking northward, a great open-air auditorium lies at one's feet. Tier upon tier of stone benches rising around its sides, and five great monumental statutes, posted like gigantic sentinels guarding its sacred precincts.

This mound, so conspicuously located on the open side of the Great Plaza, attracted the attention of the English traveler and archæologist, Mr. A. P. Maudslay, who visited Copan in 1885, spending

several months there in photographing and making molds of the sculptures and in studying the ruins. He cleared its sides and excavated it. The summit, he says, is very small, and shows no signs of any building ever having stood there. Digging through the floor he sank a shaft into the interior of the pyramid and found at a depth of 6 feet from the top an earthen pot which contained several jade beads, a few pearls, a jade spindle whorl, perforated disk, and some



(Photo by J. L. Nusbaum.)

RUINS OF SEATED FIGURE ON HIEROGLYPHIC STAIRWAY.

Blocks from several steps of the noted stairway showing the broken sculpture representing a human figure in the central part of the stairway.

roughly carved pieces of pearl shell. The bottom of the pot was covered with some finely ground cinnabar and several ounces of quick silver. Fragments of human bones were taken out during the course of these excavations and, finally, at a depth of 9 feet below the level of the plain, the skeleton of a jaguar was uncovered.

The use of this pyramid without a building of any kind surmounting it must forever remain a mystery. Perhaps here in full view of

the assembled inhabitants of the ancient city were practiced the bloody rites of human sacrifice; or perhaps the decrees of rulers or the omens from above were handed down. Who can say now? One thing alone seems reasonably certain; the close proximity and commanding relation of this pyramid to such a vast open-air auditorium as the Great Plaza indicates that it formerly played some very important part in the life of COPAN.

The most interesting feature of the Great Plaza, however, is not this pyramid, but the great sculptured monuments, which are scattered



(Memoirs of Peabody Museum.)

DRAWING OF THE SEATED FIGURE (PARTIALLY RESTORED) IN CENTER OF STAIRWAY.

here and there around the inclosure. Of these, five are now standing and three lie prostrate. They average not far from 12 feet in height and are about 3½ feet in breadth. The general treatment of them all is much the same. The side facing the plaza is uniformly sculptured with the likeness of a human being sometimes of one sex and sometimes of the other, carved in very high relief, which, in places, amounts to sculpture in the round. The clothing and headdresses of these figures are exceedingly ornate, displaying a profusion of lavish ornamentation truly barbaric in its splendor. The ancient sculptors, however, were more concerned with the elaboration of the wearing apparel than with the proportions of the human form, since in almost all cases the figures are short waisted, the distance between the shoulders and the waist line being considerably shorter than in nature.



Photograph by A. P. Maudslay.

COVERED STAIRWAY IN THE TEMPLE OF THE GREAT PLAZA.

Well-laid flight of steps formed of large blocks of stone leading to the platform facing the center doorway of the Temple in the Great Plaza.

The sides and backs of these monuments are usually covered with hieroglyphics, though this latter is not a constant feature. Near each one of them, usually just in front, there is a smaller block of stone, sometimes round and sometimes square. These, because of their close connection with the larger monuments, have been called altars, and it is not unlikely that they may have served some such a purpose. They are elaborately sculptured with grotesque figures and in some cases with hieroglyphics also.



(Photo by J. L. Nusbaum.)

A WELL-PRESERVED STELA AT THE RUINS.

View of one of the most perfect stelæ, showing elaborately carved ornaments and rows of hieroglyphics adorning its sides. The stela is carved from a single block of compact limestone and measures nearly 12 feet in height.

The terrace surrounding the Great Plaza originally supported buildings on all three sides, but these have now fallen and lie in ruin. In front of the structure on the west side there formerly stood another of those large monuments, but this has been overthrown and broken like many another here at Copan, a pathetic commentary on the departed glory of this once great people.

Leaving the Great Plaza and its interesting monuments behind, and proceeding southward about 100 yards, we enter a narrow court 290 feet in length by 135 feet in width. This inclosure has been named "The Court of the Hieroglyphic Stairway," because of its most remarkable feature—an imposing flight of stairs ascending the pyramid at its southern end. This stairway, including the elaborately sculptured balustrades on each side, measures 33 feet in width. Its steps, which average a foot in height, have their vertical faces covered with hieroglyphics. At the base, jutting out from the middle, there is a platform 5 feet high and 10 feet wide. The very conspicuous location of this not only with reference to the hieroglyphic stairway, but also to the court as well, would seem to indicate that formerly it served some important function, perhaps that of a sacrificial altar. On the tenth step up from the bottom, midway between the balustrades, there sits a life-sized human figure carved in stone, its face apparently issuing from the mouth of a great grotesque head. Judging from the fragments of similar figures found among the débris at the bottom of the stairway, it would seem as though this feature of decoration must have continued at regular intervals clear to the summit of the pyramid.

The hieroglyphic stairway was first uncovered by an expedition sent from the Peabody Museum of American Archæology and Ethnology of Harvard University to Copan in 1892. Before excavation this structure was entirely overgrown with large trees, which effectually concealed everything. As the work of clearing progressed, however, it became apparent that the upper five-sixths of the stairway had slipped from its original position above and had crashed downward, causing irreparable damage to the delicate sculptures on the faces of the steps. When completely excavated only the bottom 15 of these, out of a total of upward of 90, were found to be in position.

This monumental stairway, rising steeply for 90 feet, its steps and balustrades elaborately sculptured, and full-size human figures occupying its center at regular intervals clear to the summit, must have presented in former times a striking appearance and offered an effect but little short of stupendous. It was the most remarkable construction in the city, and we can well believe that the temple above to which it led was one of Copan's holiest places, perhaps even her chief sanctuary. The loss occasioned by its destruction, moreover, can not be overestimated, since in its entirety it presented the longest hieroglyphic inscription which has been discovered in the whole Maya area.

Ascending the steep slope which forms the southeastern side of the court of the Hieroglyphic Stairway, we find ourselves on the summit of a broad terrace overlooking the Eastern Court. This inclosure, though somewhat small (about 125 feet square), originally must have been one of the most beautiful parts of the city, judging from the elaborate sculptures now strewing it in great profusion. On its



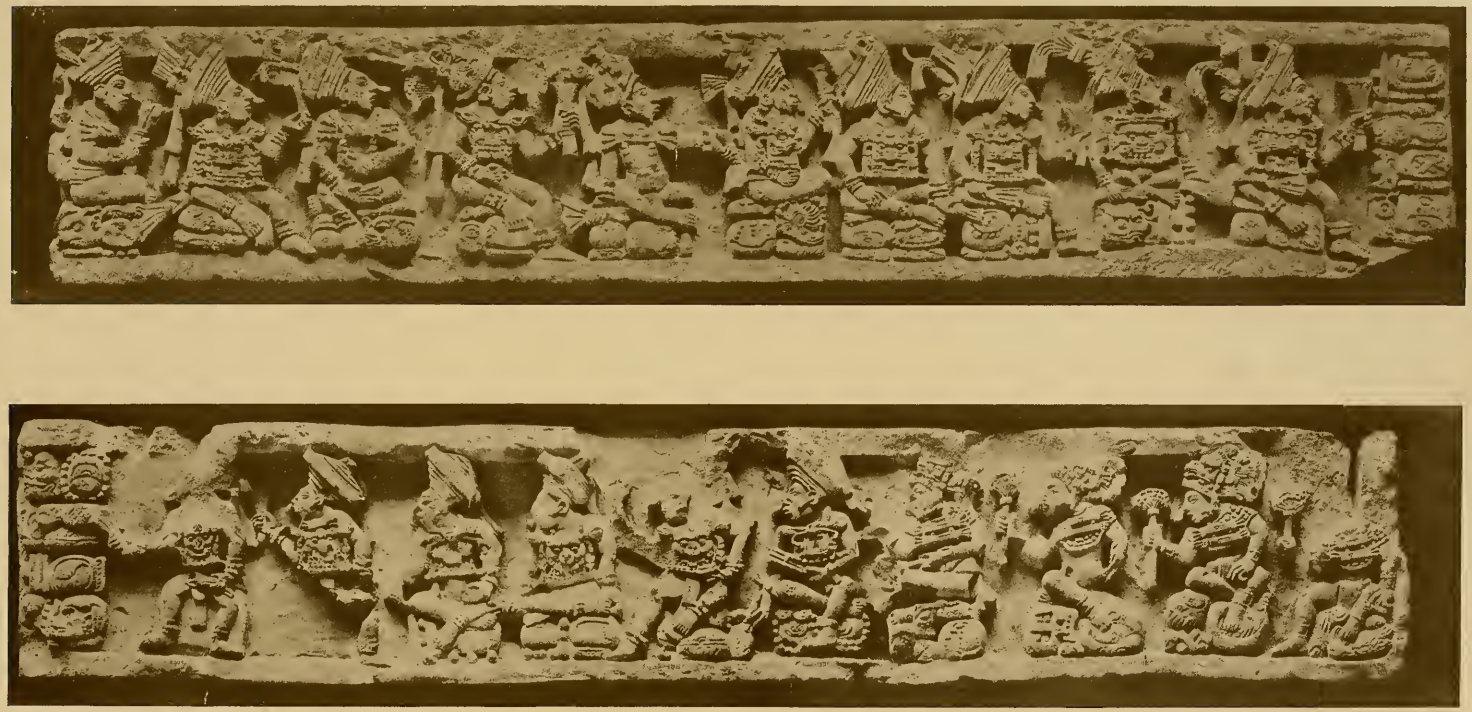
Photograph by A. P. Maudslay.

WEST SIDE OF DOORWAY LEADING TO THE INNER CHAMBER OF THE GREAT TEMPLE.

south side rises the highest pyramid at Copan, the summit 112 feet above the level of the river. Across the greater part of the western side extends a broad, rather low stairway, flanked by two life-sized rampant jaguars sculptured in high relief. This flight of steps leads to a broad terrace overlooking another court. The remaining sides of the Eastern Court are occupied by high terraces, which support a number of ruined structures. One of these on the northern terrace was excavated by Mr. MAUDSLAY, who found there a beautiful interior doorway 9 feet wide, over which there is an elaborate frieze supported at its ends by crouching human figures of heroic size, the whole being carved in high relief almost amounting to sculpture in the round.

The structures on the eastern and remaining terrace have for the most part disappeared, their destruction having been due to a change in the course of the Copan River, which now washes the exterior base of this terrace. This cutting away of the great substructure of the main group of buildings by the river is one of the most interesting and at the same time deplorable features at Copan, since ultimately, if not checked, it can mean nothing more nor less than the total destruction of the city. Originally, and probably throughout the aboriginal occupation of the city, the Copan River flowed some distance to the east of the main group of buildings which we have just been describing, giving them a wide berth. Later, however, for some unknown reason, the stream changed its course and sweeping over the plain was only turned aside by the vast mass of the substructure supporting the buildings of the main group. Here centuries ago on the eastern side the river commenced its work of destruction. At first the damage must have been slight, a stone dislodged here and there and washed away by the ever encroaching waters. Then, as time went on and this undermining action of the river continued unchecked, larger and larger pieces broke off and fell into the stream, until finally a great vertical escarpment over 100 feet high has been formed. To-day this same destructive process continues apace. Every year great masses of rubble hearting, loosened by the torrential rains of summer and fall, break away from the top of the substructure and crash downward, whilst the river ceaselessly undermines and carries away the base. Indeed, if the river is not speedily diverted from its present channel it will only be a question of time when Copan will be but a memory.

But this wholesale demolition is not being accomplished without its accompanying lesson in archæology. This great vertical wall, cut by the river all along the eastern side of the main group, is the largest cross-section of an archæological site in the world. Here, like an open book, one may read the successive periods of the city's growth. At different levels from the hollows upward throughout the rubble hearting of the substructure there are horizontal strata of



Photograph by A. P. Maudslay.

FACE OF STEP IN THE TEMPLE OF THE GREAT PLAZA.

cut paving stones. These are the pavements of different plazas dating from successive epochs of the city's history, and they clearly demonstrate that the growth of Copan has been gradual. As time passed and the population increased, newer and larger structures and plazas were built to meet the needs of the growing city. These constructions, as we see from the cross section of the substructure, were built directly above the older ones. When it became necessary to build a new plaza its rubble foundations were laid on the paving of the old plaza which it was to replace, and thus the highest of the substructure slowly increased. A careful study of the floors of these successive plazas would doubtless teach much as to the different epochs of the city's occupancy, and might even reveal important facts relative to its history.

Before closing this description it may not be out of place to explain here our reasons for having called Copan "The Mother City of the Mayas." Briefly stated, it is because of the greater antiquity of its hieroglyphic inscriptions as compared with those of every other Maya city now known. This greater age of Copan is indicated, not only by the actual dates recorded in its earliest inscriptions, but also by a cruder technique in their execution. Later, in the best period of the southern Maya civilization, sculpture is found to be in very high relief or even in the round, and is characterized by a great profusion and elaboration of detail. Nothing of this, however, appears in the earliest monuments at Copan, where the relief is so low that it amounts to little more than incised lines, the sculptor apparently not feeling sure enough of his technique to attempt anything more ambitious. Again, these earliest monuments are very plain; the human form is never presented on them, all four sides being simply inscribed with rows of hieroglyphics. This is another indication of their greater antiquity; since the sculptors who carved them had not yet gained sufficient practice in their art to venture to portray the human form, but confined themselves exclusively to line work, a much easier method of expression.

Aside from this question of technique, however, the dates themselves recorded on these more crudely sculptured monuments are much earlier than those on the more elaborate ones. The earliest historic date at Copan preceded the earliest historic dates of all the other great Maya cities by intervals ranging from twenty to three hundred years, or, expressed in terms of Maya chronology, from one to fifteen katuns, the Maya "katun" being approximately equal to twenty of our own years.

For these two reasons, then, the more primitive character of its earliest monuments and the actual priority of its earliest dates, we have called Copan "The Mother City of the Mayas," well convinced that her hoary age, vast extent, and surpassing splendor amply earn for her that distinction.



Photograph by A. P. Maudslay

RESTORATION OF DOORWAY LEADING TO INNER CHAMBER OF THE GREAT TEMPLE.

This temple is the largest so far discovered at Copan.

# BALSAM OF PERU[a]

## A CENTRAL AMERICAN CONTRIBUTION TO THE PHARMACOPŒIA ∵ ∴ ∵ ∵

BALSAM of Peru comes from the Republic of Salvador. This paradox is one of the little ironies of tradition, but the term has become so firmly implanted in our language that no amount of correction will ever quite root it out.

The discovery of America seems to have given rise to many such inaccuracies. Even America is a misnomer. When COLUMBUS found the Caribbean Islands in all their virgin wildness he called them the Indies, and the simple native savages he dubbed Indians, ignoring the fact that the Indians of that time were among the most civilized of peoples. Illustrations could be multiplied, but this one will suffice, and the explanation of it is not dissimilar from that of many others.

After Mexico, the land of El Dorado for Europeans was Peru. But transportation from Mexico to Spain was in almost a straight line, with, perhaps, a pleasant break in the long voyage at Cuba. Not so the traffic from Peru, for in this case the perilous flight around the Horn was impracticable, even for those hardy navigators, and the result, therefore, was that vessels steered north for Panama. There they had to unload their cargoes for transport across the Isthmus and for shipment again in other bottoms for Spain. Everything thus gathered from south Pacific seas was apt to be called Peruvian, whether from Peru itself, from Chile, or from mysterious Potosi.

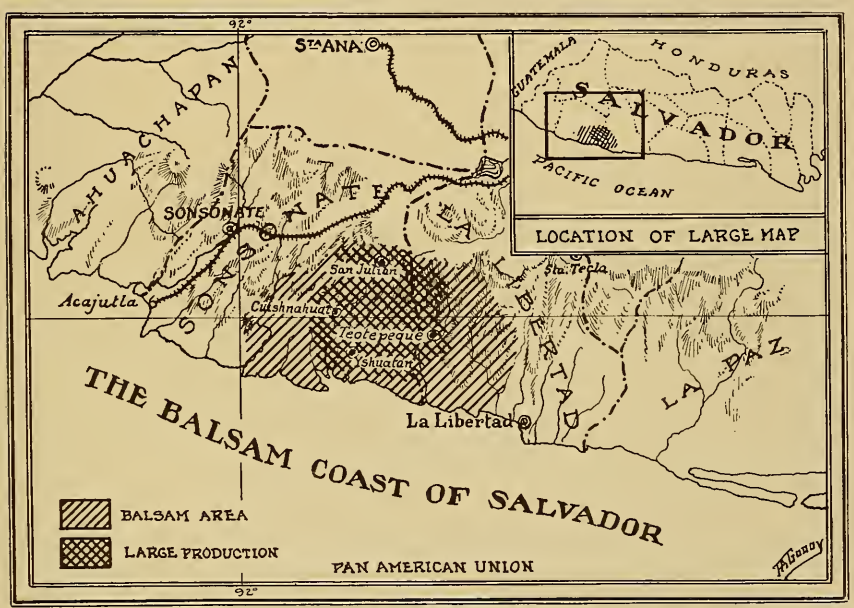
After the conquest of the west coast of Central America by ALVARADO, shipments of indigenous products from there also went eastward across the Isthmus of Panama, but as the ignorant European bothered himself little about the source of his new supplies, he was content to mix this balsam with the fever-curing bark from the Andean regions, and to call it Peruvian, as well. Yet it came and comes now only from that part of Central America known as Salvador, the balsam coast.

It is strange that nature has reserved a few small areas of the earth's surface for some of her most treasured products. Rubber has a restricted habitat, although man has by art enlarged it. The banana will not thrive commercially beyond a narrow tropical area which has a peculiar banana climate. Even more confined is the region in which the Balsam tree grows, for, although other countries undoubtedly have ground and climate suitable for this plant, in no other

[a] By Albert Hale, of Pan American Union Staff.

country except the west coast of Central America is it native, and in no other country has it been exploited by the original inhabitants, except in the Republic of Salvador.

Along the western slope of Nicaragua both soil and climate are eminently suitable for the tree, and in fact groves have been set out with the hope of cultivating them into bearing, but the time is as yet too short to determine what success will be reached; in Guatemala the trees are known to exist, but they are not utilized. Even if the commercial results are all that can be expected, the product will still be called Balsam of Peru.




THE BALSAM COAST OF SALVADOR.

The Republic of Salvador has a coast line on the Pacific Ocean only, and from its ports must therefore be shipped all its products. If they go across the Isthmus of Panama, as has been the case for 300 years and more, these shipments are confused with those from Peru, in South America. Hence balsam from Salvador was called Peruvian. This coast is rich in agricultural and forest resources, but is best known for the peculiar tree which yields its juice as the balsam of commerce.

This Balsam coast extends along the western Pacific slope of Salvador, between the ports of Acajutla and La Libertad, a distance of only scant 40 miles, or allowing a short distance on either side the extreme limits of the recognized growth of the tree in all this region is only 50 miles. Assuming that this strip has a depth from the coast of 15 miles, which is very liberal indeed, there is an area of only 750 square miles at the most over which the tree is exploited. Why nature restricts her activities so curiously as in this instance is an interesting problem for the botanist.

As it was shipped in primitive traffic in cocoanuts, it has been called cocoa balsam, and finally, that its place of origin might be nearer

the truth, it has also had applied to it the description of balsam *sonsonatense*, from the city in Salvador through which most of the commerce has been conducted.

The balsam tree is of the family of leguminosæ, and is therefore related to peas, beans, and acacias. Its more exact appellation is *myrospermum* (peruiferum, let us omit that misnomer) or *myroxilon Pereirae;* the ancient native name was *Hoitziloxitl*, whatever that means. The scientists of the Republic prefer, however, to be definite in the nomenclature, and have therefore expressly accepted the designation *myrospermum sonsonatense*, or preferably *myrospermun salvadorense* as most appropriate for all occasions. They desire also that the subtitle be popularly changed into Balsam of Salvador or of Sonsonate.

The balsam tree is one of the most beautiful of a tropical forest. It may be found, in its natural state, in groups so evenly distributed as to suggest a plantation, but usually it grows rather isolated from its kind and even separated from its neighbors a respectful distance. In appearance it is a stout tree, measuring at full development about 1 meter (about 40 inches) in diameter and reaching upward as tall as 25 to 35 meters (80 to 115 feet). The trunk is cylindrical, the bark somewhat cracked, of a grayish or ashen color, with whitish blotches due to the parasitic lichen that cling to it. Few branches spring from it until the spread is reached, but the robust roots, especially in mature trees, extend along the surface of the ground before sinking finally beneath the soil. The bark of the branches and twigs is also gray or reddish and covered with numerous little white and hard excrescent-like spots. The outer wood is white, the inner is red or almost black, and extraordinarily hard; as it is also very durable it offers splendid material for construction work and furniture.

Flowering takes place through a stem of about 10 centimeters (4 inches) long, with numerous white blossoms. The fruit is a pale yellow, membranous, feathery pod, with only one seed, as a rule. Blossoms are put out in February and March, and the seeds may be used for planting, but if the tree is to be cultivated it is better to gather the little shoots that grow spontaneously around the parent trunk, transplanting them to the intended spot at a minimum distance of 4 meters (12 to 13 feet) from each other. This operation is best carried out at the beginning of the winter. In general, however, the trees grow wild, although plantations have been set out in Salvador and in Nicaragua, but as it is of slow growth and does not yield its product before the twentieth or twenty-fifth year, there is no great incentive for this generation to plant what only the next generation may reap.



A BALSAM TREE IN A FOREST IN SALVADOR.

The balsam tree is one of the beauties of a tropic forest. It has few branches on its trunk, but at the top it spreads out umbrageously at from 50 to 100 feet above the ground. The blossoms are white, coming out late in the dry season. Besides its value as a producer of balsam, the tree, being long lived and of slow growth, is dense and hard, its wood being serviceable for furniture and construction work.

Balsam collecting is an interesting work, and a day spent with the *balsameros* is one to be remembered with unalloyed pleasure. Although the tree holds sap (*jugo*) at all seasons of the year, yet it becomes more abundant according as the season is dry, and consequently the summer is selected as the most favorable time for securing the crop (*cosecha*), as it is called. This is also, as can be easily understood, the most agreeable period of the year in Salvador, for the rainy weather on the western slope of the mountains is not well adapted for constant activity out of doors.



THE LEAVES, BLOSSOMS, AND FRUIT OF A BALSAM TREE.

The leaves and blossoms of the tree are very attractive features in the woods of Salvador, if one happens to visit them during the flowering season. The fruit is inconspicuous, as it is rather small, yellow in color, and has, as a rule, only one seed. They may be used in planting, as nature intended, but the shoots growing at random at the base of the parent trunk are the best source of supply for future cultivation.

The balsam gatherers live not far from the tree or trees which provide them their income. If several trees grow close together, the grove is fenced in by the putative owner and the privilege of tapping them may be rented out, but if each tree is isolated and alone it is supposed to be the property of some particular native, and he will locate his home and his family in a hut near by. Here he remains during the rainy season as comfortably as he can, and from here he

begins his work as soon as the summer opens. The entire process, from collecting the crude sap to its final storage into metal cases for shipment abroad, is not all in the hands of one individual, but divided itself rather naturally, like rubber and chicle gathering, into two procedures. The contract system has been tried, where some individual owns quite a property with many trees, but as a rule it has been found more practical to let the *balsameros* work by themselves in the forest, delivering and selling the crude sap, collected by their skill, to the local merchant, who prepares and ships it to market entirely on his own venture.

The little station of Bebedero, on the line of the Salvador Railway, 36 kilometers (22 miles) from the port of Acajutla, 69 kilometers (43 miles) from the capital, San Salvador, is one of the best places from



A BALSAMERO AT WORK, SETTING HIS TRAPO OR CLOTH IN WHICH THE BALSAM IS COLLECTED.

The juice of the balsam tree does not flow easily nor constantly; it is necessary therefore to provide some means to absorb the supply and to prevent drying or soiling in the air. The means adopted by the natives is to apply to the wound in the bark a clean cloth which sucks up the balsam as fast as it exudes. Several such cloths are used for each tree every season.

which balsam is sent abroad. The forest lies south of the village, but is close at hand, so that a pleasant hour's ride on horseback brings one into the midst of the native occupation.

When the dry season is assured the gatherer selects his tree, and at the period of the young moon (*en luna tierna*)—for the native always begins his labors with reference to the moon, and often has, for some occult reason, good experience on his side—gets it ready for yielding its precious juice. He first strikes or scratches the bark with a stone or other blunt instrument, girdling it in a peculiar fashion of his own, or in some cases passing up the tree from near the ground; the bruise thus made is intended to detach the outer bark but to

leave the second, inner, layer exposed. This hole thus made in the bark is called the window (*ventana*), and the aim is to make it rectangular, 25 to 28 centimeters high by 15 to 16 centimeters wide (10 or 11 inches by 6 or 7 inches).

From this tender portion of the tree there exudes, after a variable period of from five to eight days, the mature sap of the tree, which seems to have no resentment against such mutilation; it flows slowly but steadily, and can be collected without contamination.

The most popular method of obtaining the sap is to attach to the wound or window (*ventana*) a piece of cloth (*trapo*) of about a size to cover it, and sufficiently absorbent to become impregnated completely with balsam. The method adopted by rubber and chicle gatherers has been tried, in which small cups are placed directly under the wound so that the sap may run into them, but this does not seem to be acceptable to the natives. This cloth must be extremely clean, or otherwise the flow will not be steady, and the dirt on the cloth will make the further process an uneven one.

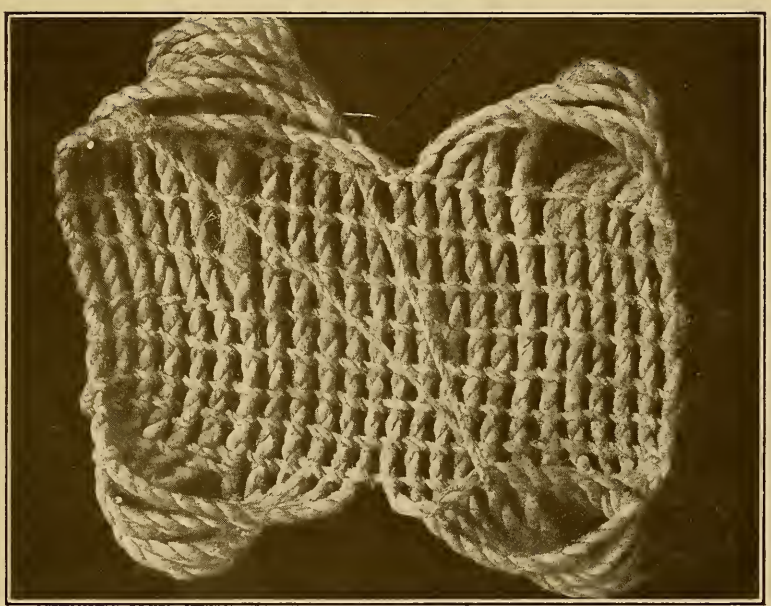
At the end of an uncertain period, 8 to 10 days according to the weather, the flow ceases, and it must be again stimulated by a second irritation. This is accomplished by applying heat to the tree by means of a burning torch, the preferred article being made from the best native wood available, say the laurel, for that purpose. Great skill is necessary in using this heat to get just the right effect, for if the torch is approached too closely the balsam catches fire and will be itself consumed, while threatening the entire tree with destruction. Heat is applied every two months, and between each stimulus of this kind five or six cloths (*trapos*) are changed. A final collection of sap is obtained, in some cases, by scraping the wound and the various strata of bark down to the inner wood, and after reducing this bark to a powder, boiling out the residue in water.

The trees seem not to be materially injured by this mutilation, although if it is not expertly done serious damage is apt to result. Usually, however, they recuperate rapidly, the bark is restored, a crust or cicatrix grows over the wound, and the natural vigor continues. This scar must be scraped off down to the more delicate bark before the operation is to be repeated at the next gathering. The result of production is thus about the same from year to year. If more violent means are used, such as the complete denudation of the tree, a greater quantity of balsam is obtained at one time, but its quality is not so good, and the injury to the tree may destroy it. Only the freebooters of the guild resort to such illicit practices, and then at a time of the year—the winter season—when the better class of balsam gatherers are not at work in the forest.

Another trick of the trade is the adulteration of the crude balsam by mixing with it an amount of raw sugar, or the charred husks of

cacao diluted in water. The man who purchases the crude balsam is on the lookout for such deceptions, and punishes any native guilty of this malpractice by withdrawal of credit account at his store. Perhaps the natural contrast between the efforts of the gatherer and the desire of the dealer, one seeking to get the better of the other, explains the fact that the two occupations are seldom successfully associated.

The life of the balsam tree is about one hundred years. The gathering of sap is begun at the age of twenty-five years and may be continued indefinitely, unless some accident to the tree occurs meanwhile. The annual gathering begins in December and lasts until



A BALSAM PRESS OF NATIVE MANUFACTURE.

As the cloths that have become saturated with balsam are collected they are thrown into boiling water for a time and then immediately subjected to heavy pressure in this contrivance. The crude balsam is squeezed out, falling into the hot water where it settles to the bottom. After this the water is poured off.

June, but if the winter is very dry, it may be continued throughout the year. The supply diminishes in February or March, when the tree is in blossom, and at this period the tree must be handled with due care. It has been found by long experience that the scar caused by a contusion heals within a year, but that from an incision three years are necessary for complete cicatrization. The rule is therefore observed that it is best to practice the bruising method as a matter of economy in time, but the incision method as a matter of conservation of the tree itself. All these fine points are farmers' lore, as animatedly discussed among the *balsameros* in the woods as are the

soils and plantings for corn and coffee among more worldly agriculturists.

So far for the balsam crop. When at last all the sap has been collected, from one tree or a dozen of them, the pieces of cloth are loosened and at once placed in a kettle of water in which they are boiled for half an hour; some of the impurities rise to the top of the water and are skimmed off, but the balsam is still retained in the meshes of the cloth. The pieces are then immediately, while quite hot, thrown into a primitive kind of press composed of a small meshed net of coarse cord or braid, in endless folds. The net is so arranged that loops are left at the outer edge of the mesh; by means of these the net is suspended from poles adjusted for that purpose, while



PREPARING BALSAM FOR SHIPMENT.

The crude balsam is finally collected into a big kettle in which it is subjected to just enough heat to evaporate the water and to cause the impurities to rise to the surface. When thus purified it is the balsam of commerce.

through another loop a bar is passed, which serves as a lever to squeeze the net as it is rotated.

As the cloths (*trapos*) are squeezed the sap exudes and settles to the bottom of the kettle beneath, for the specific gravity of balsam is higher than water; the liquor on top can then be poured off, and what is called crude balsam (*bálsamo bruto*) alone remains. This again must be purified before it is ready for shipment and a foreign market.

At this stage of crude balsam the balsam gatherer delivers his goods to the dealer, who pays what it is worth at the moment, and from that time he assumes responsibility for the article and reaps his profit according to the price and its excellency.

Now for the finishing process. When the merchant receives the unclarified balsam, he puts it into a vat beneath which a slow fire

is kept burning; as the viscous liquid is warmed, the water is driven off by evaporation and the organic impurities gather gradually on the surface. The mass must be kept almost constantly in motion, partly to encourage the evaporation, but principally to prevent a sudden ebullition of the stuff, which might be disastrous, for if it boiled over, a quantity would be lost, and if it caught fire, a portion would be destroyed and the remainder rendered of inferior grade.

After the clarification is completed, the liquid is poured into rectangular tins, each containing about 55 pounds of balsam, and at last shipped to its European or American destination. By this time it has become the well-known article of commerce, and on its arrival at the pharmacist's needs but little more preparation to serve its purpose in medicine. Between the merchant and the dispensing druggist there is many a slip, however, and chance for adulteration; to it may have been added other resins of cheaper character, castor oil, olive oil, or alcoholic extracts of several kinds. But chemists have learned how to discover these dishonest dealers' tricks, and there are fewer of them as the source of supply becomes better known.

A well-nourished balsam tree will yield on the average from 3 to 4 pounds of sap a year; the best of them, if cared for in anything like a modern agricultural system, can part with 8 pounds a year and still remain uninjured for the next season. From the savage plan of destroying the tree for the sake of its few extra pounds of balsam to this modern principle of conservation is a far cry, but the lesson has been learned by experience that the best results are obtained by moderate means, and, moreover, the Salvador Government has awakened to the fact that scientific agriculture is a valuable asset in the nation's wealth, and not only is encouraging thrift in the collection of forest products, but also is developing plans for reforestation of areas within the Republic already denuded of its natural growth. If the demand for balsam increases, it is probable that more systematic planting will be done under Government supervision.

A few general remarks about the tree and its celebrated product are worth attention. Only the inner bark yields true balsam, and then only that from the mature tree; although the immature tree does give juice, it is nevertheless thin, light, poor in quality, and of small commercial value. From the leaves comes only a volatile oil, and from the seeds a juice resembling balsam, but unsatisfactory for pharmaceutical purposes. No other part of the tree yields anything but a gum or resin of one kind or another. Pruning in early years helps the tree by strengthening its trunk from which true balsam exudes, but no balsam appears in the tree until the first blossoms have passed. Thereafter this peculiar sap is stored up within the bark during the life of the tree.

Many improvements have been suggested for collecting balsam, and theoretically they are undoubtedly superior to the primitive native ways, but they are slow of adoption. For instance, a rubber-tapping knife would make a more suitable incision into and through



BALSAM PACKAGES ON THE WAY TO MARKET.

After the final preparation of balsam it is poured into tin cases (*latas*), each weighing about 55 pounds, sealed, and carried to train or steamer dock on pack animal or in ox cart. In the pharmacist's shop it requires further treatment for official use, but for ordinary purposes it is the substance which ought to be known as Balsam of Salvador. The photograph was taken on the finca "Cholota," owned by Mr. Salvador Sol M.

the bark; a portable ladder might be devised to facilitate work in and about the tree; better means of attachment of the cloths to the tree could be planned; pressure to the cloths could be more uniformly applied; straining the refuse liquor from the valuable balsam might

be more thorough. In fact, modern economy is needed, but old ways and habits should be overcome only by demonstrating to the conservative *balsameros* their practical advantage over his own.

Salvador exports annually about 130,000 pounds (gross) of balsam, the most of which, 65,000 pounds, goes to Germany, but the United States received almost 57,000 pounds, and France 7,500 pounds. Hamburg is the principal market, and the quotations there fix the world's price, which has fluctuated between 12 and 22 marks per kilogram ($2.86 to $5.24 gold for 2.2 pounds). As this represents the world's supply, and as the demand is increasing, it is a good business for all concerned.

The Government of Salvador has recently imposed an export duty on balsam of 1 *peso* (about 40 cents gold) per quintal gross (101.4 pounds). This will tend to increase its cost to consumers.

Balsam of Salvador (or Peru, as it is known in the Pharmacopœia) is a viscous, grayish red, semifluid mass, of pleasant odor not unlike vanilla, and bitter, burning taste. It is not very stable when exposed to air, and must therefore be kept in the dark or made rather soon into combinations for whatever purposes it is finally to be used. It is put to service for many kinds of ointments, salves, pomades, and local applications, as well as being of value for internal administration in suitable preparations. It is a resin, but has an action peculiarly its own, and on that account can not be readily displaced from medicine or surgery.

The historic, or even prehistoric, use of the balsam was almost altogether surgical. Applied to wounds, it seemed to have a wonderful power to stimulate the healing process, while being at the same time a natural antiseptic, incapable of doing harm. Even to-day, with all the eliminations that have gone on in surgical practice, the balsam is of value, and being a natural, not a laboratory, product, shows its affinity where other drugs fail. It is good in some skin diseases and the parasitic irritations that so frequently distress the resident of the Tropics, whether he be native or alien. Its more recent value, however, has been developed through the particular ingredient which characterizes the balsam, and which has been called cinnamic acid. In tuberculosis, preparations of cinnamic acid have had their vogue, and are still trusted for certain stimulating effects. Surely, if even one case of tuberculosis is cured by this drug, it should be treasured as another of the great contributions of American flora to the welfare of mankind.

# ADDRESS OF ASSISTANT SECRETARY OF STATE AT THIRD NATIONAL PEACE CONGRESS

IN THE editorial comment reference is made to the address of the Hon. HUNTINGTON WILSON, Assistant Secretary of State, at the Third National Peace Congress, Baltimore, Md., May 4, 1911. This speech, coming from a man who is so intimately associated with the foreign policy of the United States, is worthy of reproduction in the columns of the BULLETIN and is quoted in full below. It has a special interest to Latin America because of its reference to that part of the world and its bearing on the peace and commercial policies of all nations.

*Gentlemen of the Third National Peace Congress:*

Those who work in the Department of State and foreign service ordinarily do not talk much of peace except when war threatens some other country. I am proud to be connected with an administration which within two years has actually prevented three wars. When the opposing armies of Ecuador and Peru were in sight of each other the telegraphic proposals of the United States brought about the tripartite mediation of the Argentine Republic, Brazil, and the United States. The proposal was well received by Ecuador and Peru and they abstained from war. A few months ago the Dominican Republic and Haiti were at swords' points. The influence of the Government of the United States stayed their hands. Also within the last few months the good offices of the United States put an end to civil war in Honduras. Here are three actual achievements of the peace which is your ideal. These things the President and Secretary KNOX have done.

Among other practical modes of pursuing the ideal of world's peace is the true meaning of what has been called "dollar diplomacy." Of course this term may be applied to commercial diplomacy. To-day international commerce is everywhere an important department of diplomacy. In so far as our diplomacy is commercially successful, we are proud of the fact. We are not above being practical and commercial, and, from the less material point of view, commerce means contact; contact means understanding; and if one is worthy enough to be respected and liked, if understood, international commerce conduces powerfully to international sympathy. I say, if one is liked as well as respected. Here, fortunately, the idealist's interest in foreign trade as conducive to peace coincides with the business man's interest in foreign trade for financial profit. A merchant can be so disagreeable that one prefers to pay higher prices to a pleasanter trader. Roughshod methods are a useless handicap that can only be overcome, if at all, by immense superiorities. The most rudimentary business sense should dictate tact, sympathy, and considerateness in dealing with foreign customers. So, in the broader view, every American business man or traveler, every student in university or school, who is inconsiderate, supercilious, or lacking in sympathetic appreciation of his foreign associate, makes himself a missionary not of good will but of ill will, and so radiates an influence not for peace but for war.

But I use the newly coined phrase of "dollar diplomacy" in another sense. It means using the capital of the country in the foreign field in a manner calculated to enhance fixed national policies. It means the substitution of dollars for bullets. It means the creation of a prosperity which will be preferred to predatory strife. It means availing of capital's self-interest in peace. It means taking advantage of the interest in peace of those who benefit by the investment of capital. It recognizes that financial soundness is a potent factor in political stability; that prosperity means contentment and contentment means repose.

This thought is at the basis of the policy of the United States in Central America and the zone of the Caribbean. There this policy is one of special helpfulness in a neighborhood where peace and progress are especially important to the United States, and where, moreover, they are due the aspirations and the splendid resources of the peoples of those neighboring Republics.

In China the same principle has been invoked to enable the United States to take its share in the material, as it has in the moral and intellectual, development of that great Empire.

To the intellectual and moral development of the progressive Ottoman Empire the United States has contributed the greatest share. There, too, it is hoped that American commerce and material enterprise will also contribute.

So, also, "dollar diplomacy" is enabling the United States, through a loan by this country, Great Britain, France, and probably Germany, to give practical effect to its ancient special obligations to Liberia, incidentally removing the causes of friction between that struggling Republic and its powerful neighbors.

The President's aspiration to the ideal of world peace was signalized in more abstract form in the public utterance on the 18th of last December of his hope that the two great English-speaking peoples might set a new and higher standard of international self-control by a broader treaty of arbitration. As you know, this task is now the subject of pourparlers between the American and British Governments, and it is not improbable that diplomacy may gradually solve the extremely difficult problem of finding practicable bases of negotiation.

Governments are the trustees of the nations' international interests. They bear this heavy responsibility and consequently are beset at every turn by considerations of what is practicable, what is practical, what is now and will in future be for the true and enduring benefit of the nations they serve.

Thus, the everyday work of peace through a benevolent and candid diplomacy, as well as the definite working out of the occasional marked advances in international morality, must fall upon Governments and upon departments of government expert in the facts of international relations.

In the second category of instrumentalities working for international peace fall the Interparliamentary Union and the work for which Congress has enabled the President to appoint, when opportune, an American Peace Commission. These agencies, although not official in the strict sense nor diplomatic in their functions, still carry special weight through their relations to the representatives of the people in the legislative branch of government.

To the third class belong all those powerful agencies, like the many peace societies here represented, which have been and are doing such a great work in promulgating the ideals of peace and arbitration along with more practical ideas toward their attainment.

While both these classes of instrumentalities must leave to the government its diplomatic work toward peace, they can and do powerfully second that work through their influence and propaganda both at home and abroad.

Great things have been accomplished along certain lines and the criticism that peace propaganda are unpractical has not yet been justified. It may be questioned, however, whether unless new lines of effort are adopted the state of public feeling can be so steadily further improved.

First of all, much can be done by active interest in and intelligent support of the everyday practical policies of government, which, if looked at otherwise than superficially, will be found to be very real measures toward peace. Such is the policy so wonderfully successful in Santo Domingo; such are the broad principles involved in the Honduras loan convention now before the Senate; such is the Lowden bill for the improvement of the foreign service—a service which, charged with all this work, should certainly not be amateurish and untrained. Here are fields for practical effort.

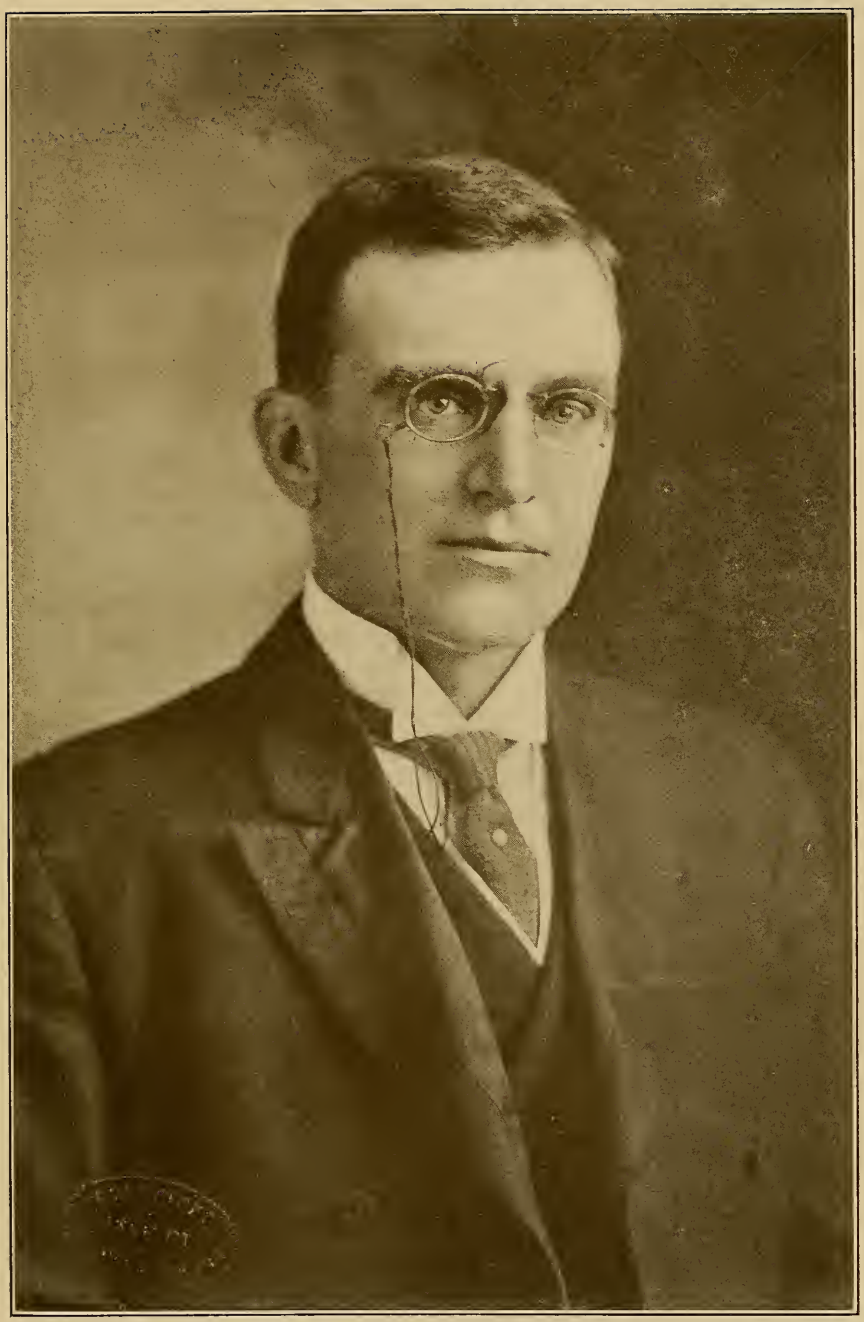
Municipal law confirms and inscribes the high-water mark of the ethics of the majority. International law crystallizes the persuasive value of what powerful nations accept, still with reserve, as the canons, at a given time, of their conduct. Every reasonable man is for peace, just as every man would prefer to go to Heaven; but to secure the one or the other requires something more than aspiration. The millennium will not come for the wishing. Our own Nation has a very unenviable record for crimes of violence. Individual self-control has not reached a plane where any peace advocate wishes to have the police force abolished. International peace must depend upon international self-control and sense of justice, and, the spirit of a nation being but that of a collection of individuals, one comes straight back to the schoolhouse, the factory, the farm, and the newspaper. There must be self-controlled and patriotic and enlightened citizenship if there are to be peace-loving, strong nations and governments able to remain at peace. As George Ade states the moral of one of his fables in slang, "In uplifting, get underneath."

It is almost to state a syllogism to say that next to national character the greatest factor toward peace is true international understanding, and that, after diplomacy, the newspapers play the most important part in bringing about or retarding such true understanding. In the case of the United States, the true understanding of the American people and of the true ideals and policies of their Government is horribly hampered by the fact that, in the Far East, for example, and still more in Latin America, almost everything bad and nothing good of us is reported in some section of the newspapers of most countries. Every lynching and scandal, every discreditable thing, which it is our unique custom to air so energetically, is repeated in its worst version by a section of the press of most of these countries. In the case of many countries which have important colonies engaged in business—for example, in Brazil, in Peru, in China—their nationals support locally their own organs, which, probably often subsidized, carry on a patriotic service of their country.

Thinking of Mr. Carnegie's munificent gift, it occurs to me that the establishment and subsidy of four or five newspapers in Latin America and the Far East, with means to give adequate and respectable telegraphic news service and with a nonpartisan and patriotic guidance of their policy by trustees who should be disassociated from the Government and independently representative of patriotic American citizenship, would be a splendid and proper means to that international true understanding which must be at the basis of peace.

To go back to the root of the matter—that is, to national character and a clear and true outlook on the part of the individual citizen—it has often been pointed out that more care is given the evolution and physical condition of cattle, which enter into commerce, than is given the physical condition of humanity since it lost its commercial value with the abolition of slavery. In these days when we honor the soul and the mind more than the body and when the world is regulated by moral and intellectual rather than physical forces, is it not still more strikingly important (to speak only of the cause of peace) that the minds of the people should be fed and not poisoned in reference to international affairs?

It is quite natural that in countries where dangerous frontiers or other weaknesses make a fight for national existence a familiar possibility to the people, foreign relations should be of vital interest. In such countries the man in the street takes a shrewd interest in his country's foreign relations. Much space is given them in the press. To write of them is familiar and they are a reality. With us it is less so, and conse-



HON. HUNTINGTON WILSON.

The Assistant Secretary of State of the United States.

quently when a certain section of the press gives rein to its imagination our public, less compelled to a vital interest, is the more easily misled. When one newspaper promulgates an interesting story of impending war, one can hardly blame its more conservative contemporary for giving the story for what it may be worth. The harm is done by those very few newspapers, and seemingly from one of the three following motives: First, because the impression caused by the story will subserve some separate purpose which the newspaper honestly believes for the public good; second, the story is used by an opposition journal to attack the administration; or, third, the story is printed for purely commercial purposes as a "penny dreadful" for the debauchery of the seeker after sensations. Of course, the last should be suppressed, like the purveyor of injurious drugs. The partisan newspaper might, one would think, understand that while to attack a Government's domestic policy or vigorously to join issue in case of a sincere difference of opinion upon foreign policy is legitimate, nevertheless indiscriminately to embarrass the diplomacy of the country through frivolous misrepresentation or malicious attack is not to assail any administration, but is to attack the country itself among the nations of the world—something for which there is an ugly name, and as to which there should be something beyond the present statute. I am happy to say that I have in mind isolated instances only, and that I believe the American press, as a whole, is already beginning to respond to its patriotic and moral obligations, so increased since the United States entered on its destined position as a great world power.

What our press says in the Capital or elsewhere is echoed around the world as the composite speech of America. Thus, irresponsible speech on international affairs carries the double tragedy of misleading the minds which are the ultimate power of our own country and embittering the minds of half-forgotten multitudes around the world.

The subjects of peace and of armaments are usually associated—sometimes in the sense that disarmament is the object of peace; sometimes even as if disarmament were a means to peace. Sometimes, and more truly I think, it is pointed out that ample armament is the best safeguard of peace. Some nations have what they want. It is not unnatural that these should have an idea as to the best moment to stop the war game different from the idea of those nations which have not what they want. Former President Roosevelt recently pointed out that to be prepared for war no more meant an unpeaceable disposition than to carry fire insurance meant a special expectation of fire; that both meant merely a common-sense safeguard against an off-chance, the off-chance being always that it takes two to insure peace as well as to precipitate war.

I am sure the American people are protagonists of peace for a higher reason than the economy of disarmament. If ever a country could afford armaments, it is ours. As a business proposition it would save, in the unfortunate event of war, the appalling loss of life and money involved in headlong hasty preparations and also the time necessary to make a people already warlike also military. As a burden it could hardly exceed what is wholesome to bear, and the effort would focus the national spirit. And undoubtedly the most practicable step toward the desired international spirit of humanity is to begin with the right national spirit. Some people even think that a large army and a system of military training would do more toward peace through instilling patriotic solidarity and discipline than it would for war through the temptation of having weapons handy.

We have laws against carrying concealed weapons because a violent man with a concealed weapon is more dangerous than a muscular Christian fully armed. Is a warlike nation, not fond of discipline and possessed of vast resources, less dangerous than one openly carrying its olive branch and also its arrows and thunderbolt? War springs from the human heart, not from the arsenal; and the human heart, rather than the archives of diplomatic engagements, is still the only ultimate sure abode of peace.

The nation which can do most to secure international peace must be the nation with the highest ideals plus the greatest military efficiency. It is such nations that in striving for and realizing their own advantage contribute the most toward advantaging their neighbors and the world.

# RECEPTION OF THE AMBASSADOR OF MEXICO

THE BULLETIN takes much pleasure in extending a cordial welcome to Sr. Don MANUEL DE ZAMACONA É INCLÁN, the newly accredited Ambassador of Mexico to the United States, and hopes that he will avail himself of the columns of this publication in the interests of progress and development of his country.

On Wednesday, April 19, the official reception of the new Ambassador by President TAFT took place at the White House. While the ceremonies were characterized by the usual simplicity and dignity of such official meetings, yet the interchange of expressions of good will and friendship which obtained on this occasion added a personal tone to the affair that was most gratifying.

In presenting his credentials, Ambassador INCLÁN said:

Mr. PRESIDENT: I have the honor to place in your hands the letters accrediting me as Ambassador Extraordinary and Plenipotentiary of Mexico to the United States of America and the letter of recall of my predecessor, Licenciado Sr. Don FRANCISCO LEÓN DE LA BARRA, appointed to the office of Secretary of State for the Department of Foreign Relations.

Respect for justice and right being the Mexican Government's standard, as it is that of the Government of the United States of America, the relations of friendship between the two Republics are in every way so constituted as to continue in the same state of frank and fond cordiality by which they happily have long been characterized. To cultivate them is the sincere and constant desire of my Government and of the Mexican people, and the main object of the mission, most gratifying to me, which I have the honor to fulfill.

Peace, at present incidentally and momentarily broken in Mexico, will soon be restored when the effect of the frank and patriotic declarations of the President of the Republic, which carry effective guaranty for all the legitimate interests, national and foreign, linked with the maintenance of order, is felt.

I flatter myself with the hope that your Government will be pleased to bestow upon me the same favorable reception as was given my predecessors, which will in a high degree contribute to the better discharge of the honorable duties which bring me to this Republic.

It affords me great pleasure to offer to you the best wishes of the President of the United Mexican States, and my own for the continuous advance of the intelligent, industrious American people and for your own personal happiness.

President TAFT replied as follows:

Mr. AMBASSADOR: I receive with pleasure from your hands the letter whereby you are accredited as Ambassador Extraordinary and Plenipotentiary of Mexico to the Government of the United States. I have no doubt that the friendly efforts of your predecessors to cultivate and maintain cordiality of intercourse between the people of the two countries will be continued by you to the same high ends, and that the affairs of the high office with which you are charged will be by you conducted in a manner equally satisfactory.

The Government of the United States, having none but the best wishes for the happiness of the Mexican people, can not but feel the liveliest interest in their peace and prosperity. It is therefore the fervent hope of the United States that harmony may soon prevail and that the Mexican people, in full concord and with a unanimity of purpose, will proceed toward their great destiny.

I ask you to be so good as to convey to President DIAZ the expression of my appreciation of his good wishes and to assure him of the like feelings which I entertain for his personal happiness. For your own friendly sentiments I thank you.

I shall take an early occasion to make formal acknowledgment of your predecessor's letter of recall.

# CALL FOR FIFTH INTERNATIONAL SANITARY CONFERENCE

IN accordance with the resolution adopted at the Fourth International Sanitary Conference, held in the city of San Jose, Costa Rica, from December 25, 1909, to January 3, 1910, the date November 1–12, 1911, has been fixed for the assembling of the Fifth International Sanitary Conference in the city of Santiago, Chile.

The following official correspondence in regard to the call and the provisional program of the Conference are printed in the interest of the Conference:

INTERNATIONAL SANITARY BUREAU,
*Washington, D. C., May 10, 1911.*

Hon. JOHN BARRETT,
*Director General Pan American Union, Washington, D. C.*

SIR: In accordance with a resolution adopted at the Fourth International Sanitary Conference, held at San Jose, Costa Rica, December 25, 1909, to January 3, 1910, and with the approval of the International Sanitary Bureau, I inclose herewith a call for the meeting of the Fifth International Sanitary Conference. A copy of the provisional program that will govern the deliberations of the Conference is also inclosed.

I have also to request that, pursuant to the provisions of paragraph 7 of the resolutions relative to sanitary police, adopted at the Second International Conference of American States, you take the necessary measures to announce this call and bring the provisional program to the notice of the Governments concerned.

It is understood that the proper representations will be made by your office to the Legation of Chile, so that the invitations to the Conference may be jointly issued by that Government.

Respectfully,

WALTER WYMAN,
*Chairman International Sanitary Bureau.*

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FIFTH INTERNATIONAL SANITARY CONFERENCE OF THE AMERICAN REPUBLICS, TO BE HELD IN THE CITY OF SANTIAGO, CHILE, NOVEMBER 1–12, 1911.

INTERNATIONAL SANITARY BUREAU OF THE AMERICAN REPUBLICS,
*Washington, D. C., May 12, 1911.*

Announcement is hereby made that, in compliance with a resolution adopted at the Fourth International Sanitary Conference, the Fifth International Sanitary Conference of the American Republics will be held in Santiago, Chile, November 1–12, 1911, under the presidency of Dr. ALEXANDER DEL RIO and the auspices of the Chilean Government.

The attendance of representatives of every American Republic is earnestly desired, including those which have not taken part in previous conferences.

As stated in the provisional program, a number of subjects will be discussed at Santiago which are of vital interest to all the nations of this continent, and it is expected that the deliberations of this Conference will be fully as important and fruitful in results as the preceding ones. The provisional program which follows is subject to amendment or revision as may subsequently seem advisable.

PROVISIONAL PROGRAM FOR THE FIFTH INTERNATIONAL SANITARY CONFERENCE OF THE AMERICAN REPUBLICS, TO BE HELD IN THE CITY OF SANTIAGO, CHILE, NOVEMBER 1–12, 1911.

1. Reports by the several delegations in regard to the sanitary legislation enacted in their respective countries since the last conference.

2. Special reports relative to the means employed in the different countries for the enforcement of the resolutions agreed to in the last convention.

2. Reports discussing the vital and morbidity statistics of each country during the last two years.

4. Special reports on the sanitary progress of the principal cities in each country.

5. Discussion of measures relative to social hygiene, with special reference to venereal diseases.

6. Determination of what constitutes immunity to yellow fever.

7. Discussion of hygiene of sea traffic, having in view specially systematic measures for the deratization of ships.

8. Discussion of hygiene of tramway and railroad traffic.

By direction of the International Sanitary Bureau of the American Republics.

WALTER WYMAN,
*Chairman*

# BOOK NOTES

"**An American Consul in Amazonia.**" By Maj. J. Orton Kerbey, New York. William Edwin Rudge. 1911. 370 p. Plates. Illus. Size 6 by 9½ inches. *Price, $2.50.*

This story of an American consul to Para under the old régime gives an accurate and detailed picture of social, business, and climatic conditions in the great rubber port.

Maj. Kerbey relates those little incidents of daily life that are always interesting in these outposts of civilization and give such an insight into the character and manners of the inhabitants.

Through no fault of his own, the consul was put in a false position with the foreign colony in Para, at the beginning of his incumbency. However, his good sense and tact helped him through many difficult situations and served to open to him the doors of the houses of the best of the Brazilian families and thus enables him to give us intimate pictures of their delightful home life.

The author shows us all the charm and atmosphere of affection which surrounds the Brazilian home without ever violating the confidences of his hosts.

Maj. Kerbey, in common with many others who know Brazil, believes that Republic to be the storehouse of future generations, but also sees in the fertile field of Amazonia, a land where the products of the Mississippi Valley may be exchanged for Brazilian produce, to the mutual advantage of the traders. He strongly advocates the establishment of a steamship line between New Orleans and Para as a means of promoting such trade.

The author has followed the winding course of the mightiest river of the world from its source, a tiny lakelet nestling in the heart of the highest Andes, through trackless equatorial forests to its mouth, where for a stretch of 138 miles wide it pours fresh water into the Atlantic Ocean. This experience stamps the writer as familiar with his subject and assures the accuracy of his statements.

The book is full of excellent information, of value to anyone contemplating a trip to Amazonia, and is enlivened by interesting anecdotes that make it easy reading, while the personal touch that pervades the whole volume puts the reader in intimate knowledge of conditions in Para.

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"**The Diamond,**" by W. R. Cattelle. New York. John Lane Co., 1911. 433 p. plates. Size 5½ by 8½ inches. *Price $2, postage 15 cents.*

The word "diamond" conjures to our mind's eye lands of romance and riches. India, the continent of a hundred kingly courts, where thousands of brilliant gems sparkled from robes of swarthy courtiers; Africa, where the power of the proud North nation was put to bitter test in the struggle for the world's greatest treasure lands; Brazil, where the outcast "garimpeiro" wades the forest streams in darkest night searching for spoil the law forbids him. Indeed the brilliant has borne more on the destinies of men and nations than perhaps any other influence save religion.

There is much confusion as to the derivation of the vocable "diamond" due to the fact that in ancient times the word was synonymous with "hardness" or "hardest substance." In fact, some philologists trace a direct descent for diamond from adamant. The original Greek "adamar" passing into the form "aimant" in France and "demant" in Germany during the Middle Ages. Is there not also in this transition to "aimant" some connection with the stone's standing as a love token?

We are so prone to make mental pictures of the glory and brilliancy of ancient courts out of our own knowledge as developed by modern standards of luxury that it is difficult to realize that in those olden days one stone of now insignificant size was fit adornment for a king, while girls of our day in even moderate circumstances sometimes wear a queen's dowry of the romance ages.

While it is contended by some that diamonds were known 5,000 years ago, still it is doubtful if they were esteemed really precious stones until the fifteenth century, when the art of cutting and polishing them was discovered. In this connection we must remember that it is only within the last 50 years that the present perfection in stone cutting and polishing has been developed, resultant in those beautiful crystal prisms of fire so common to-day.

The greatest diamond of the ages is the "Cullinan," which weighed when found in refuse of the Premier mine, 1 pound 6 ounces, 3,025¾ English carats, and experts believe to be only the fourth of a stone forever lost in the wastage.

While India was for centuries the land of greatest diamond supply and to-day the most productive fields are those of South Africa, still in Brazil are found great numbers of stones, although few of large size.

Mr. Cattelle devotes a chapter of his book to the Brazilian diamond fields. He tells us that diamonds were first discovered there in the early part of the eighteenth century by some natives who were washing the river sands for gold. The date was probably 1725. The stones were not recognized at first by the gold miners, who used them as counters in their games of chance. Their character was discovered, however, by one who had seen rough diamonds in India. Diamantina was the neighborhood where the gems were first found, although the town was called Tejuco in those days, being happily renamed after the finding of the carbons. The country in the vicinity of the Jequetinhonha River and Rio das Valhas has been the seat of the richest discoveries. At first the Government—that of Portugal—taxed the industry of diamond mining so heavily that the output was insignificant, and the gravels were left to be exploited by the "Garimpeiros," who evaded the law. With the establishment of the Empire, mining privileges were easily obtained, and they have so remained until the present day. In the early days slave labor was exclusively employed, and the methods of treating the workers was what might be expected as a corollary to their masters' greed.

The story of the "Star of the South," one of the largest diamonds ever found in Brazil, is typical of the vicissitudes through which these stones sometimes pass. Found by a negress in the mines of Begarem, Minas Geraes, the crystal weighed 254½ carats, was of irregular dodecahedron shape, with strongly obtuse angles, and with 24 natural facets. The configuration of the facets, showing deep depression, suggests that it was one of a group of crystals.

It was sold for $15,000, and the negress received her freedom and a pension as a reward. The first purchaser borrowed $50,000 on it from the Bank of Rio de Janeiro, and afterwards sold it to a syndicate for either $170,000 or $240,000. It was named "Estrella do Sud," and was cut to an oval brilliant of 125 carats. Thus it made a clean, fine stone of first quality. Because of its size and beauty it was exhibited at the exhibition of London in 1862, and Paris, 1867, when an Indian Rajah offered over half a million dollars for it, which was refused. Later it was bought for the Gaikwar of Baroda for 8 lacs of rupees, or $400,000. This royal personage of Hindustan had the habit of administering powdered glass or diamond dust, or both, to subjects whom he judged superfluous. He pursued this pastime beyond his own immediate sphere and prescribed for the British Resident, one Col. Phayre, but his art was detected, he was tried, found guilty, and deposed.

Another important product of the Brazilian mining country is carbonado, which has now come into such extensive use in the manufacture of diamond drills. The

world's supply comes from the Bahia fields. When first found in the diamondiferous deposits, these "carbons" were considered worthless, but now they bring $55 a carat in New York.

With the discovery of diamonds in South Africa, work in the fields became unprofitable, and the diamond industrydwindled in importance. There was a revival in the late nineties, and even now a number of new companies are hopefully exploiting the old and new diamondiferous districts.

Mr. CATTELLE continues with a description of borts and carbons, but all through his work he shows an appreciation of the beauty of the gem worthy of a true artist. After bewailing the fact that the modern standard of value, as measured in dollars and cents, has destroyed the reverence and spirit of mysticism which diamonds should inspire, he concludes:

> And because the diamond advertising literature of the day reeks so with the spirit of the bargain counter and the gem flashes so commonly from the unclean hands of politics, vice, and graft, the noblest product of nature's gigantic laboratory is by association oftentimes made vulgar.

The book is thoroughly comprehensive, handsomely illustrated, well bound, and evidently contains the last word on the most precious of gems.

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**"Impressions of Mexico with Brush and Pen."** By MARY BARTON. New York. The Macmillan Company. 1911. 160 p. illus. Size 5½ by 8 inches. Price $3.

To anyone who has seen Mexico in the beauty of its wonderful coloring it is easy to understand the attraction of the country for an artist.

The gorgeous purples of distant mountains tempering to blue, with sometimes a mass of silver white snow rising from faintest shaded rose, where a monarch volcano overtopped the other peaks, all a maze of shades and tints that crush with a sense of color. Acres and acres of cosmos fields, of "mirasol," blankets of pink and gold, the whole crossed by streams of crystal clearness banked in deepest green. Even the most unobservant must succumb to the beauty of the land.

Miss BARTON has succeeded in catching some of these illusive effects and transferring them to canvas, and she has embellished the book with wonderfully good reproductions in colors of her work. An artist of evident ability, she shows in her studies a result that can only come through conscientious effort, unbounded enthusiasm, and true love of the work. "Popocatapetl" is a splendid picture, equaled by "The Mountains of Cuernavaca," and it is our regret that no opportunity affords of viewing these paintings in the original. "Hills at Patzcuaro" is excellent in cloud effect, but it does not compensate the absence of a painting of the lake. The reproductions are the best of their character it has been our fortune to see for some time, and the whole construction of the volume is tasteful. The author is not so happy in the text, however.

It is to be regretted that she did not find it convenient to visit Tzintzuntzan and inspect the reputed Titian. An expert opinion on its validity would have added value to the volume.

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**"Historia Contempraneo de Venezuelo."** By FRANCISCO GONZÁLES GUINÁN. Press of "la Empresa El Cajo," Caracas. 1909 and 1910. Vols. I to VII. In quarto. Each volume 500 to 600 p. Illustrated with numerous photogravures.

Students of Venezuelan history will find this one of the most thorough and comprehensive works dealing with the land of the immortal BOLÍVAR.

Dividing his work into nine epochs, the author has given us 7 volumes covering the first four periods only. From this the magnitude of the contemplated task is understood.

The 7 volumes contain not alone the story of the march of political events in Venezuela since its discovery, but also administrative changes, legislative, industrial

development, social and literary culture; in fact, all that has made for the moral and material advancement of the land of the llanos.

The four periods under discussion include, first, the conquest, colonization, and establishment of Greater Colombia, succinctly, from the discovery by COLUMBUS up to the death of BOLÍVAR and dissolution of the Great Republic; second, commencing in 1830, when the Venezuelan Republic was definitely established, until 1847; third, 1847 to 1850, when the generals JOSÉ TODEA and JOSE GREGORIO MONAGAS held the reins of Government; fourth, relates the Fusionisto revolution of 1858, with its direful consequences; the seventh volume just received, concluding with the events of the year 1862.

Señor GONZÁLES GUINÁN, by this monumental work, has taken a place in the very front rank of Venezuelan historians.

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**Brazil:** Two books relating to Brazil have recently been received in the Columbus Memorial Library of the Pan American Union, and they are both of such remarkable value that they deserve careful notice in the pages of the MONTHLY BULLETIN.

They both show how changed has become the habit of mind in studying Latin America in general, and, in this case, one Republic in particular. Formerly, and as a reproach the statement may be brought against many book writers of to-day, the traveler's personality was supposed to vivify the pages of his work; he selected the unusual, the extravagant, the bizarre for the subjects of his chapters; he made comparisons almost always to the detriment of the country visited and in favor of the country in which his readers were most numerous, and his general attitude was one of superiority and self-complaisance. Sketchiness was characteristic, and an unprejudiced analysis of conditions in their economic or social significance was seldom attempted.




(Reproduced from "Liga Maritima," Rio de Janeiro.)

NEW STATUE OF DOM PEDRO II.

With elaborate and impressive ceremonies, this splendid statue of Dom Pedro II, Emperor of Brazil from 1840–1889, was unveiled at Petropolis on the afternoon of February 5, 1911. The monument occupies a prominent place in the park called Praca de Alcantara, and is the work of Mr. Jean Margou, the famous French sculptor.

Quite otherwise are the purpose and the design of these newer essays upon Brazil. Each is written from a different viewpoint, one being German, the other French, yet the results of both critiques are practically the same, namely, that Latin America (in this case the Republic of Brazil) deserves an acknowledgement of the great accomplishments of the present, and a most thorough study of the wonderful opportunities offered by that part of the new world for future development, both material and intellectual.

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**In Brasilien** (*In Brazil.* By Dr. W. VALLENTIN. Berlin. Hermann Paetel. Price 4 marks, = $1 gold).

Dr. VALLENTIN is an experienced traveler; he has spent some years in Africa, where he took an active part in the Boer War, and he has also become well acquainted with the Far East. His more active interest, however, has been attracted toward

South America, and from his pen have already come books touching on Paraguay, Argentina, with particular details of this latter Republic, and a general summary on German influences in South America (BULLETIN, April, 1911, p. 732). His opinion is therefore well seasoned, and his ideas are those of a student observer who has long since lost provincial habits. The very preface inclines the reader to a favorable review, for the author asserts that the general opinion of South America is vague and incorrect, and that too little attention is paid to conditions as they really are. Although Dr. VALLENTIN is sincerely German, he, for that reason perhaps, is constantly insisting that the Germans are behind their competitors in taking advantage of the business and industrial field in Brazil, and even illustrates United States activity there, as well as British, to demonstrate how energetic should be the German propaganda for recognition of possibilities there. The harbor of Rio de Janeiro is for the author the most beautiful in the world, and the public utility improvements of that city are commendable to a high degree; the interior of the country (Dr. VALLENTIN confined his travel to the region south of the State of Minas Geraes) is declared to be, both as regards climate and productivity, undeniably habitable for Europeans, that is, the white race in general, and the evidences of the self-sustaining power of the coming nation are without question. From all such data presented, nevertheless, two points are made most prominent. First, that Brazil deserves far greater notice than it has hitherto received, for commercial and financial expansion, and that if Germans do not at once bestir themselves a splendid outlet for German goods will soon have become closed, owing to its absorption by commercial rivals; second, that the German colonists in Brazil have contributed greatly to the solid prosperity of the Republic, and carry with them the old world habits of thrift and expansion, but—and this is the important deduction—that the "German peril" is an unsubstantial phantasm, because the German, loyal in spirit as he always is to the Fatherland, is now an American, a Brazilian, for better or for worse, and would of his own accord reject the proposal to be governmentally incorporated into any monarchy across the sea. Fair minded as he always is, Dr. VALLENTIN concludes, notwithstanding this quite definite conviction above mentioned, that Brazil should continue to be the haven for German emigrants, rather than the United States, partly for reasons of opportunity to the immigrant himself, partly also because in a commercial sense they remain for many years steady consumers of German products and natural providers of imports into German markets.

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**Brazil.** By PIERRE DENIS. London. T. FISHER UNWIN. 1911. (New York, imported by CHARLES SCRIBNER'S SONS.) $3. This is a translation of M. DENIS'S *Brazil au XXe Siècle*, published in 1909 in Paris, but the English edition has a new chapter containing the history of Brazil and a recently added supplementary chapter devoted to mineral resources, trade, and commerce. Altogether it is one of the most readable and at the same time most trustworthy books on Brazil which has appeared on that interesting country. The three really fine maps also contribute not a little to an understanding of the text, while the 36 views are above the ordinary excellence of photographic illustration.

If the reader's attention is attracted to one point in the book more than to another, it is the thorough study made by the author of the causes, character, and results of immigration into Brazil, and to this topic he devotes not only many pages, but a keen analysis which shows how well he understands it. The effect of the very early importation of negro slaves, the subsidized colonial system for the German in south Brazil, the State-encouraged supply of Italian laborers in the coffee region of Sao Paulo, and even the emigration from the State of Ceara into the rubber regions of the Amazon, are most carefully presented, and although not always in favor of such wholesale methods of peopling a country, M. DENIS yet finds that the original European stocks thus planted must be, if not pampered by unreasonable State aid or discouraged by neglect, of value to the Republic, in the long run. Another important problem discussed in this book is that of the coffee valorization scheme put forward in 1906 by the State of Sao

Paulo. Chapter X is devoted entirely to that unique experience in commerce by Government, and in no other single book is the subject treated with such impartial detail. Preceding valorization are chapters on the economic life of Brazil, and on money and exchange, with a history of coffee growing in Sao Paulo, so that the reader is well prepared for this pièce de résistance itself. A few facts concerning Brazil, such as the railway mileage (11,000, in 1909), need correction to correspond to the date of issue, but these are, after all, insignificant compared to the uniform scholarship shown by both the author and translator. The publishers should be rebuked, however, for advertising the series to which M. Denis's book belongs as the South American Series, when Volume III is given as Mexico. Far better would it be to call it the Latin American Series, for it is to be hoped that, if they can select such excellent essays as this of M. Denis on Brazil, future additions may include those that study countries beyond the geographical limits of the southern continent.

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The Columbus Memorial Library is in receipt of the following pamphlets:

"**The Republic of Panama and Its People, with Special Reference to the Indians,**" by Eleanor Yorke Bell, is a very extensive descriptive article, well illustrated.

"**Papers of the Peabody Museum of American Archæology and Ethnology, Harvard University. Volume VI, No. 1.**" By Prof. William E. Gates. The author provides a practical method of reproducing the Maya glyphs that should aid materially in their decipherment. The pamphlet concludes with a masterly essay on language.

"**Report of the Secretary of the Smithsonian Institution for the Year ending June 30, 1910,**" gives a discussion of the expedition directed by Dr. Aleš Hrdlička. Curator of the Division of Physical Anthropology, and the collections made by him. While the evidence gathered is of considerable importance, unfortunately it does not sustain some of the opinions that have been heretofore held in regard to prehistoric man of Argentina.

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"**Diplomatic and Consular Archive,**" **Bolivia.**

A copy of the publication entitled "Diplomatic and Consular archive of the Minister of Foreign Relations" for January and February, 1911, edited by Sr. Armando Chirveches, Assistant Secretary of Foreign Relations of the Government of Bolivia at La Paz, has, through the courtesy of the Bolivian Minister in Washington, been presented to the Columbus Memorial Library of the Pan American Union. This interesting pamphlet is divided into two sections, i. e., the diplomatic and the consular. The former contains, among other things, the decree of January 9, 1911, declaring the reestablishment of diplomatic relations between Bolivia and the Argentine Republic; the treaty of commerce and navigation with Brazil of August 12, 1910; diplomatic correspondence with Chile concerning the extradition of Moises Fuentes; the address of the Minister of the United States of America on presenting his credentials to the President of Bolivia; and diplomatic correspondence between Bolivia and several other countries. The consular section is principally devoted to the correspondence and reports of the consuls of Bolivia in Para, Brazil, Genoa, Italy, Bordeaux, France; a list of the officials of the Department of Foreign Relations and Worship of Bolivia; a list of the personnel of the diplomatic and consular service of Bolivia in Europe and America; and a list of the foreign diplomatic corps resident in Bolivia.

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"**Argentina Past and Present.**" By W. H. Koebel. New York. Dodd Mead & Co. 1911. xxiii, 455 pp. Plates. Size 6½ by 10 inches. Price, $4 net.

The English edition of this book was extensively reviewed in the December (1910) issue of the Bulletin. The American edition is as artistically bound and as carefully printed and illustrated as the English.

# LATIN AMERICA IN THE MAGAZINES

"**The Madness of an Unfortified Canal,**" by JAMES CREELMAN in the Cosmopolitan for May, is an exposition of the reasons which the author considers sufficient in justifying the United States continuing their intended program of defense on the Canal Zone. The story is told in Mr. CREELMAN's striking style, and is an excellent exposition of this side of the question.

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"**Fortification of the Panama Canal,**" a paper in The American Journal of International Law for April, by the Hon. RICHARD OLNEY, takes up the legal aspect of this question, showing that the right to fortify the Canal according to Mr. OLNEY's interpretation of the two treaties is one of implication only, and the implication results on what Mr. OLNEY thinks to be a wrong conclusion based on false premises.

Mr. OLNEY discusses briefly the relation between the Clayton-Bulwer treaty of 1850, in which the contracting parties agreed that neither would erect or maintain any fortifications commanding the Canal or the vicinity thereof, and the Hay-Pauncefote treaty of 1900, which by clause 7 stipulated as follows:

> No fortifications shall be erected commanding the Canal or the waters adjacent. The United States, however, shall be at liberty to maintain such military police along the Canal as may be necessary to protect it against lawlessness and disorder.

This treaty, however, did not pass the Senate, but a new one was framed in December, 1901, in which the clause regarding the fortifications was omitted.

Mr. OLNEY contends that such omission is not an agreement by Great Britain to allow the United States to fortify the Canal. It would seem that this right was taken by the United States because of an interpretation found in a certain memorandum sent to the Senate which gave Mr. HAY's view of some of the reasons for the provisions of the treaty. From the recent act of Congress, it would seem that this discussion has passed the academic stage.

In the Supplement of the same magazine will be found the articles of the "Treaty of Commerce and River Navigation" between Brazil and Colombia, and the articles of the Convention between the United States and Mexico for the arbitration of the Chamizal case.

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"**Strategical and Economical Importance of the Panama Canal,**" by O. P. SPERBER, in the April number of the Overland Monthly, is a short paper showing how important the protection of this waterway will become in case of serious international complications.

"**The Panama Canal and Commerce,**" by E. M. LAWTON in Mining and Scientific Press for April 22, describes the effect on trade routes which may be expected after the opening of the Canal. The author concludes that one of the first countries to receive an increase in trade will be Mexico.

"**Living in Panama,**" by FORBES LINDSAY in Travel for May, 1911, takes up the question of the most comfortable way for a northerner to live on the Isthmus.

Mr LINDSAY arrives at the conclusion that the safest and sanest mode of existence is that of the native with certain modifications. He criticizes the canal employee who goes to this country and erects a frame dwelling on the same lines as the one that sheltered him perhaps in Kansas, where conditions of climate and general surroundings are essentially different from those of Panama. He also advocates following the menu of the native as nearly as possible in order to keep in good health.

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"**Cuernavaca, The Sun Child of the Sierras,**" by RUSSELL HASTINGS MILLWARD, in the March number of The National Geographic Magazine.

The beauty of Cuernavaca has been the theme of all the travelers who have visited and written about this beautiful spot.

CORTEZ, after violating the temples of the Aztecs and wresting from them their glorious land, chose Cuernavaca as his very own, and it has been the jewel most prized by the conquerors who have followed in his trail.

Mr. MILLWARD details the beauty of the scene with surrounding mountains suggesting Switzerland in their sublimity, a picturesque panorama of verdant hills, blue lakes and tropical plains, dotted with Aztec ruins, all combining to make it one of the most beautiful valleys to delight the eye.

A most interesting feature of the place is the Borda gardens, the work of a Frenchman, JOSEPH DE LA BORDA, who had amassed a gigantic fortune in Mexico. The garden is supposed to be modeled along the lines of the famous retreat at Versailles, and the sum of $500,000 American dollars was spent in laying it out. Recently it has been sold for $15,000.

The consensus of opinion of all those who have visited this charming spot, and an opinion that is concurred in by Mr. MILLWARD, is that the climate and picturesqueness of surroundings make it the ideal spot for him who seeks peace from the tumult and toil of life's struggle.

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"**The Basis and Object of Archæological Research in Mexico and Adjoining Countries,**" the inaugural address of the Director of the Internatinoal School of American Archæology and Ethnology, Prof. EDUARD SELER, delivered at the opening of this school, appears in full in Science for March 17.

Prof. SELER details the aims and objects of the institution in conducting investigations in the sister sciences of archæology and ethnology. After a general outline of the work done by the various learned bodies engaged in this character of investigation throughout the world, Prof. SELER takes up the opportunities that lie before the ethnologists and archæologists on the American continent. The study of the Indians, the prehistoric races, the careful unraveling of the mystery of the Mayas are calls which find echo in the spirit of all those interested in this character of work.

The author appreciates the magnitude of the work contemplated by the school's faculty and hopes by the cooperation of those interested in the subject and the training of younger minds in the same pursuits will bring about results and open up new paths of science until now only vaguely outlined.

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"**Mexican Capital is a City of Concrete,**" a short article in Popular Mechanics for May, shows how this excellent building material has been the basis of most of the recent construction in the capital of this Republic. The most important are, of course, as a rule, the Government edifices, and of these preeminent is the National Theater, which when completed will cost $8,000,000.

"**Popocatepetl,**" by FULLERTON L. WALDO, F. R. G. S., in the April issue of The Bulletin of the Geographical Society of Philadelphia is another description of the ascent and rapid descent of old "Popo."

Mr. WALDO tells of the first recorded climbing of this peak by DIEGO DE ORDAS, a captain among the followers of CORTEZ, and two soldiers, on which occasion they found sulphur, useful in making ammunition. The author then continues with details of his own ascent, which will be found useful to anyone wishing to follow in his footsteps.

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"**Dry Washing for Placer Gold in Sonora, Mexico,**" a description of this character of mining appearing in the April number of the Bulletin of the American Institute of Mining Engineers, by J. V. RICHARDS.

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"**Mexican Rubber Plantation Notes**" is a descriptive article by a special correspondent, appearing in the May number of The India Rubber World.

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"**The Railway Development of Bolivia**" is the title of an editorial appearing in The South American Journal for April 8, which, commencing with a rapid review of recent railroad developments in South America, then passes to the specific advancement made by the Republic of Bolivia along these lines. The peculiar position of that country, being entirely cut off from the sea, makes the question of its railroad development an extremely interesting one because of its bearing upon the future economical development of the country.

The question is, Which will be the most advantageous route for the Bolivian Government—to encourage the building of railroads on to the east, seeking an outlet either by way of the River Beni, and eventually to the Amazon and then European ports, or, a trans-Brazilian railroad leading in the same direction, or, on the other hand, concentrating all efforts on the improvement of the lines leading along to Antofagasta and Arica, this being the shorter route by rail, although leaving the exports at the seacoast considerably farther from Europe than the first two routes suggested? However, the completion of the Panama Canal will have a bearing upon this last phase of the question.

It would seem that the logical course for the Bolivian Government to pursue would be to encourage both east and west outlets for her wonderful resources, still undeveloped. This, at least, is the opinion of the editorial writer.

A recent Chilean writer suggests that by granting liberal facilities to the trade of Brazil the Government of that country would no doubt be induced to prolong its lines to the Bolivian frontier at Corumba, thus giving Bolivia the advantage of build- a connecting line to La Paz, linking up there with the Arica to La Paz Railway, making a complete line from the Atlantic to the Pacific, via Brazil, Bolivia, and Chile.

In this connection it may be said that the Brazil Railway has already prospected the extension of one of its sections to the Bolivian border. From the tone of the editorial it is seen that this progressive Republic is on the eve of great railroad development.

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"**Mining in Bolivia,**" an article reviewed in The Mexican Mining Journal for May, describes the mineral resources of Bolivia and the possible fields for developing the same.

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The May number of The Pan American Magazine is devoted exclusively to the resources and development of Costa Rica. It is an excellent, well-illustrated pamphlet that should be of value to anyone contemplating emigrating to that progressive Central American Republic.

"**The Republic of Uruguay,**" an address delivered by Señor Don José Richling, Consul General of Urugnay to New York, before the Graduate School of Business Administration, Harvard University, is a discourse on the resources of that progressive Republic, printed in the May number of the American Exporter. Although small in size Uruguay is making an economical advance as rapid as either of her giant neighbors.

The recent activity in railroad building is a certain sign of increased commercial prosperity, while the harbor improvements under construction and contemplated in the city of Montevideo speak strongly of the advancement of the shipping industry.

The monetary system is based on the gold standard and it is a surprise for the North American to find the dollar of the United States mint valued less than the Uruguayan peso.

On a per capita basis Uruguay is the first stock-raising country of the world. Wool is the staple export, of which that country annually produces about 120,000,000 pounds. In the matter of live stock, including hides and meat, the exports were valued at $25,000,000 in 1909.

Consul General Richling shows how his country is progressing sanely and safely along rational lines that promise a fruitful future and a development of vital power which will astonish the world.

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"**The Aboriginals of Uruguay,**" by F. W. Goding, M. D., Ph. D., are two very informative papers appearing in Science of Man, Journal of The Royal Anthropological Society of Australasia, November and December, 1909 issues.

Dr. Goding makes a minute study of the life and habits of the original tribes.

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"**My Home in Peru,**" is a short article in Harper's Bazar for May, by Miss Annie S. Peck, in which she details the charm and delights of her dwelling in the Peruvian Andes. As can readily be supposed, this intrepid mountain climber would find the atmosphere of Mount Huascaran most congenial.

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"**The Cotton Production of Peru,**" is the leading informative article in Peru To-Day for April, and the author, J. A. Lavalle y García, who is an agricultural engineer and Director of the Government Experimental Station at Santa Beatriz, Lima, prepared the article for the Bulletin of Fomento.

The climate, soil, and general conditions of Peru are such as to warrant a constantly increasing output of cotton in future years. As another phase of this development, it is to be noted that the Peruvian Government is giving every aid and encouragement to the establishment of cotton mills. Turning out cotton fabrics right on the ground will be a great advantage, and possibly Peru will in the course of time develop as Great Britain's rival in furnishing cotton goods to Latin America.

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**Espana Moderna** in a recent issue gives much detailed and precise information on a most remarkable natural phenomenon, the "rain tree," or "tamiacaspi" of the Indians, found in Peru.

This variety of the arboreal growths is credited with the wonderful property of condensing moisture from the atmosphere and then giving the water out in miniature spring showers, some times so heavy that shallow puddles are formed beneath the outspread branches. Even in the dry season, the time of greatest heat and scantiest water, the moisture is exuded by these leafy trees until the abundant foliage scatters rain drops over the ground and tiny streams trickle down the trunk. According

to the traveler the water coming from these trees spreads over the ground in myriad streamlets, filtering and making fertile the sterile soil, even in time of greatest heat. They thrive in any soil, are hardy, of rapid growth, and adaptable to all variations of temperature.

We are told that during the summer season each tree precipitates 9 gallons every 24 hours, this giving us a basis for irrigation calculations.

In an area of 250 acres, 10,000 trees could be planted, allowing 1 tree to every one-fortieth acre, thus giving 85,000 gallons of water daily, and with an estimate of two-thirds for loss by evaporation and filtering, we have somewhat less than 30,000 gallons for irrigation. Thus nature mocks the Roosevelt Dam.

In the interests of conservation we started an investigation which began in the Columbus Memorial Library, lead through the Agricultural Department, Bureau of Plant Industry, and ended in the German Legation, Lima, Peru.

There is some foundation in fact for the stories of the rain tree that come from different parts of Latin America. The *Pithecolobium Saman*, the scientific name of the genisaro or guango, found in Central America, Brazil, and Mexico, is said to give up its moisture to the sucking of tree-hoppers. It also furnished fodder for cattle in its pods.

As the special characteristics of the tree promised so much, we secured a report (through the kindness of Mr. David Fairchild, United States Department of Agriculture) from Dr. A. Weherbauer, of the German Legation, Lima, who probably knows more about the flora of Peru than any other botanist. He writes as follows:

With great pleasure I communicate to you what I know in regard to the Peruvian rain tree, or tamiacaspi. I have been questioned in regard to this matter often before.

The earliest information I found in a journal published here under the name "El Peruano," and which has long ceased to exist. In this journal and actually in the number for June 9, 1877, I find a contribution, which the consul of the Republic of Colombia, who was stationed in the Peruvian Province of Loreto (upper Amazon River territory), communicated to the Peruvian Government at Lima. It told of the wonderful tamiacaspi, or rain tree; it grew in woods on the mountains near the city Moyobamba, became 15 meters high and 1 meter in thickness; it absorbed the atmospheric moisture and gave it off through its twigs and leaves in such quantities that puddles originated on the ground under its crown; it was excellently suited to water the dry regions of the Peruvian coast. The Peruvian Government requested the Italian botanist, Raimondi, who had traveled through the whole of Peru during a long series of years, and finally became a Peruvian citizen, to express his views on the communication of the Colombian consul. Raimondi's professional opinion is published likewise in El Peruano of June 9, 1877. Raimondi explained first of all that in his long journeys he had never met with the tree and made approximately the following remarks: An absorption of water through the leaves can only happen in small quantity and only then when there is a dearth of water in the soil; an excretion of water through the leaves is only possible in the case of greater moisture in the soil, and would cease in countries poor in water, provided that the tree can flourish there; perhaps a formation of dew is involved, which can naturally only take place in a moist atmosphere.

I myself have spent perhaps two months in Moyobamba. I have not found the tree and do not recollect to have heard of it there. Moyobamba has a climate rich in rain, corresponding to its position at the east foot of the Andes. The vegetation is formed part of tropical woods, part of low, evergreen thickets, part of grassy steppes. True xerophyte formation is entirely lacking. According to my view the much-spoken of peculiarity of the tamiacaspi can be nothing else than a strong excretion of water through hydathodes, as has been observed in Fuchsia, Tropaeolum, Alchemilla, and other plants; the leaves of Colocasia even throw great drops of water to some distance. As is well known, the new researches of Haberlandt and others have shown that the excretion of water through hydathodes is much more copious than was formerly thought and that it serves the purpose of hindering the too great taking up of water from the ground and too small transpiration, so that the intercellular spaces become filled with water. Especially copious and productive is the excretion of water in the trees of the tropical forests of the rainy regions. On the contrary, it is inconceivable in dry climates, because here the chief conditions, namely, moisture of the soil and of the air, are lacking. From a plantation of this "rain tree" in dry lands there is not the slightest good to be expected.

In conclusion of this discussion I will call attention to a statement which I have found in "De Candolle's Prodromus," a work which every great botanical museum possesses. In "De Candolle's Prodromus," volume 2, page 483, stands: "Caesalpinia pluviosa.—Brazil. From the young twigs, according to the statement of Leander, water drops comparable to a rain are excreted."

Unfortunately, from the above, hopes of using the "rain tree" in the work being done by the conservation bureau seem groundless.

"**Characteristics and Origin of the Brown Iron-Ores of Camaguey and Moa, Cuba,**" by WILLARD L. CUMINGS and BENJAMIN L. MILLER, a paper from the Transactions of the American Institute of Mining Engineers, gives an extensive description of the iron-ore deposits in Eastern Cuba.

This paper is especially important in view of the large mineral deposits recently located in Cuba, and the predicted scarcity of iron ore which threatens to curtail the activities of the steel industry.

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"**The Northwestern Railway of Brazil**" and "**The Railways of the Rio Grande do Sul,**" are two articles in continuation of that very instructive series now appearing in Cassier's Magazine for April and May. The author, Mr. LIONEL WIENER, shows a thorough knowledge of the conditions.

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"**Porto Velho as a Port,**" is an editorial appearing in The Porto Velho Marconigram, that pioneer sheet published by the Americans engaged in constructing the Madeira-Mamore Railroad, in which the editor looks to the future most hopefully and predicts that Porto Velho will develop into a port of much importance with the opening up of the rubber country of the upper branches of the Madeira River. The article is written in the self-confident style that was so popular during the boom days of early Western towns, and comes as a breath of American atmosphere from the heart of the Brazilian jungles.

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"**The Gold Mining Future of Ecuador**" is the title of a descriptive article appearing in The Mining Journal for April 22.

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"**Among the Titans of the Patagonian Pampas**" is another interest compelling paper by CHARLES WELLINGTON FURLONG, F. R. G. S., in Harper's Monthly Magazine for May, in which the author takes up the details of his adventures in search of the *Tehuelches*, the famous Patagonian giants.

It has been known for some time that the reports as to the great stature of these inhabitants of Patagonia have been exaggerated, and careful investigation has shown that, while they are a large race physically, exceedingly well developed and muscular, they are not men of extraordinary size. Mr. FURLONG confirms these conclusions, but leaves us with the impression that the Patagonians are hardly a pleasant people to live among.

Mr. FURLONG's trip was a most unusual one, he necessarily having many out of the ordinary adventures.

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"**Artesian Waters of Argentina,**" a short summary of a report received from Mr. BAILEY WILLIS, who is making a geological survey of Argentina at the request of the Government, is contained in The Scottish Geographical Magazine for March.

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"**Land Values and Speculation in the Argentine Republic,**" a comprehensive article, appears in *The Economist* for April 29.

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The leading article of The Times South American Supplement of Tuesday, March 28, is "**Mexico and the United States.**" Special articles are: "**Mexico and the Monroe Doctrine,**" "**The Ecuador-Peru Boundary Question**" (letter from Señor AVITÉS), "**Pery and Arbitration,**" "**An Impression of Buenos Aires,**" "**Englishmen**

in South America. I.—COCHRANE," "Brazil—Trade of Santos," "Venezuela and Its Future, III," "Bolivar—The Washington of South America," "Progress of South America, III, Pan-American Railway (with map)," "Passenger Services to South America," "A Sugar 'Ingenio,'" and "Land and Water South of South America."

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"Copper Mining in Latin America," by A. FLECK, Ph. D., in the April 29 issue of The Mining Journal, takes up the mineral possibilities of Peru and Mexico.

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"Latin American Business and Advertising," by FRANKLIN JOHNSTON, appearing in the May number of the American Exporter, is the report of a speech the editor of that first-class trade paper delivered at a "South American" dinner of the Worcester Publicity Association.

Mr. JOHNSTON confesses to never having sold a dollar's worth of goods in South America, but claims a first-hand acquaintance with business conditions from numerous trips made throughout the austral continent. He refers to the sin of generalization that so many untechnical "authorities" commit when commenting on foreign trade. Successful export business is no esoteric art. To learn it the beginner need spend no long novitiate studying trade secrets and systems.

The seeker in new fields of sale and barter will quickly find that business principles as he applies them at home are equally effective in Argentina or Afghanistan, United States or Uruguay. "Business is business" the world over.

Mr. JOHNSTON records that he found, on his last trip during the past year, that there was much less complaint about American neglect of export orders, bad packing, etc., and the general impression was that the present efforts of the American manufacturer in pursuit of trade were not spasmodic, but permanent.

The different methods of advertising are discussed in the article and the business man will find good advertising agencies in Mexico City, Habana, Rio de Janeiro, Montevideo, and Buenos Aires. In fact the publicity feature of business approximates the development achieved in the United States.

Naturally, Mr. JOHNSTON considers that advertising in export journals has certain advantageous elements—and he is right.

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"United States and South American Trade," and "Central American Trade," are the titles of two editorials appearing in the April 15 and 29 issues of The South American Journal. This authoritative paper in dealing with these two questions takes up the work done by the recent Pan American Commercial Conference under the auspices of the Pan American Union, and the very extensive quotations made show in no unmistakable way the influence of this Conference on South American trade. This journal quotes from the speeches of Señor FELIPE PARDO, the Peruvian Minister to the United States, JOAQUIN B. CALVO, the Minister from Costa Rica, and concludes with a warning to Great Britain to look to her laurels in the South American trade, for such conferences as the one referred to are bound to stimulate American competition in her chosen field.

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"La Conferencia Comercial Pan-Americana," an article in the Revista Americana de Farmacia y Medicina for February, 1911, gives a very extensive review of the work of the recent Pan American Conference, and as this is a trade paper which has long been in close touch with Latin American trade, an appreciation of the efforts of the Director General and his associates as shown by this article is extremely gratifying.

In fact, universally commendatory notices that have appeared in regard to the Conference in practically all of the trade papers is the best test of the success of the Conference.

The Bankers' Magazine for May contains an appreciative paragraph of the work of the Pan American Commercial Conference and the announcement that former Minister CREEL has become Managing Director of the Banco Central Mexicano.

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"**El Primer Congreso Comercial Pan-Americano,**" in La Propiedad, of Buenos Aires, by Señor JORGE P. SANTAMARINA, the distinguished Argentine engineer, who took such an active part in the proceedings and deliberations of the Pan American Commercial Conference held in Washington last February, describes his impressions of the Conference.

The article gives a short account of some of the principal features of the Conference, couched in the clear and concise language for which the author is noted, and is one of the best summaries that has come to the notice of the Pan American Union on the Commercial Conference. The many friends of Señor SANTAMARINA will be glad to read this article from the pen of one who is so thoroughly informed on the commercial affairs of the Western Hemisphere, and particularly on the present and future possibilities of the commercial relations between the United States and the Argentine Republic. No one is better qualified to write about matters of this kind than the gentleman referred to, and no one better able to express his views upon them in a more intelligent and lucid manner than is Señor JORGE P. SANTAMARINA.

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"**A Pan American Ornament Cult**" is a paper appearing in Arts and Decoration for May, giving a description of the attempt to introduce prehistoric American motifs in personal and architectural ornament—a new idea, written up by FRONA WAIT COLBURN.

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"**The Promotion of Trade with South America,**" by Prof. DAVID KINLEY, in The American Economic Review for March, is an extended review of the best methods of increasing the trade of the United States with the Latin American Republics.

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In pursuance of its South American propaganda, begun six years ago, Le Figaro, of Paris, published on April 4 an illustrated supplement on the Argentine Republic, dealing with the following questions: The Argentine Democracy, The City of Buenos Aires, Mr. PIERRE BAUDIN's Impressions of Argentina, Immigration, Stock Raising and Cattle Trade, Argentine Finances, Commerce, Railroads, Banks.

Le Figaro will soon issue another supplement on Uruguay, giving the latest financial, economic, commercial, and educational information, which will show that Uruguay is one of the foremost of the Latin American countries of the New World.

# SUBJECT MATTER OF CONSULAR REPORTS

## REPORTS RECEIVED UP TO MAY 1, 1911.

| Title. | Date of report. | Author. |
|---|---|---|
| ARGENTINA. | | |
| | 1911. | |
| Law of copyright: Decree of regulations | Feb. 9 | R. M. Bartleman, Consul General, Buenos Aires. |
| Argentine industrial census: Transmitting Bulletin No. 13, General Summary (continuing No. 435 of Jan. 3, 1911). | Feb. 12 | Do. |
| Soap factories in Argentina | ...do..... | Do. |
| Movement of vessels—port of Buenos Aires, 1910, transmitting statistics of. | Feb. 16 | Do. |
| The English Standard Directory: Transmitting copy for 1911 (continuing Mr. Bartleman's No. 191, of Jan. 7, 1910). | ...do..... | Do. |
| Transmits plan to accompany Annual Report Bureau of Mines, vol. 4, No. 3 (Mr. Bartleman's No. 334, Aug. 15, 1910, continued). | Feb. 17 | Do. |
| Foreign Commerce of Argentina for 1910: Transmitting statistics of. | Feb. 25 | Do. |
| Trade notes: Decree issued by Minister of Finance under which vessels bringing immigrants to Bahia Blanca and subsequently calling at Buenos Aires will be exempt from harbor and wharfing dues at the latter port. Industrial exhibition closed last week. Only exposition in commemoration of centennial to pay its own expenses. Argentine Minister of Foreign Affairs has issued decree directing consular officers to give lectures in respective districts. Shoe company of United States has opened American shoe store in Buenos Aires. Losses from fire in Buenos Aires. Population of Buenos Aires in 1910, 1,314,163, as compared with 1,242,278 in 1909. Number of passengers carried on tramways in Buenos Aires. Sales of real estate. Loss of sheep in Province of Buenos Aires. Plans for new freezing plant at the port of La Plata. | ...do..... | Do. |
| Bulletin of the "Defensa Agricola," transmitting for the months of November and December, 1910 (Mr. Bartleman's No. 449, Jan. 30, 1911, continued). | Feb. 27 | Do. |
| Law for the appointment of commission for the establishment of telephone system. | Mar. 2 | R. W. Bliss, Chargé d'Affaires. Buenos Aires. |
| Trade notes: Arrivals from foreign countries in Buenos Aires. Population of city of Rosario, 199,607; La Plata, 97,950. Imports of coal. Commission of geologists from United States to study question of artesian-water supply. First section of port constructed by Rosario-Belgrano Railroad Co. at Puerto Militar to be opened Mar. 20. Opening of railway from Mazan to Tinogasta has been authorized. Efforts of Bureau of Immigration to divert some of the current immigration to Bahia Blanca not encouraging. | Mar. 7 | R. M. Bartleman, Consul General, Buenos Aires. |
| BRAZIL. | | |
| | 1910. | |
| nsufficient postage on mail to Latin-American countries | Sept. 9 | P. M. Griffith, Consul, Pernambuco. |
| | 1911. | |
| Musical instruments | Jan. 23 | J. White, Consul, Santos. |
| Canned goods in Brazil | Feb. 11 | P. M. Griffith, Consul, Pernambuco. |
| New German South American cable | Feb. 21 | Do. |
| Iron and steel industry for Brazil, concession and bounties for domestic industry. | Mar. 3 | J. J. Slechta, Vice Consul in charge, Rio de Janeiro. |
| Fireworks | Mar. 5 | J. White, Consul, Santos. |
| Wheat flour in Brazil | Mar. 6 | S. P. Warner, Consul, Bahia. |
| Comparative statement of exports from the Bahia consular district to the United States during the calendar years 1900 and 1910. | Mar. 18 | Do. |
| CHILE. | | |
| Construction of dry dock at Talcahuano | Feb. 20 | H. P. Fletcher, Minister, Santiago. |
| Market for shoes | Feb. 22 | A. A. Winslow, Consul, Valparaiso. |
| Annual national trade report | Feb. 25 | Do. |
| Trade and industrial notes: During 1910, 38,708 parcel post packages were received in Chile. There were 303 tons more of copper exported during January, 1911, than in January, 1910. Chilean Government appropriated $42,000 (United States gold) to cover expenses of immigration for 1911. Exportation of nitrate for first 45 days of 1911. On Dec. 31, 1910, there were in circulation in Chile 149,351,655 pesos. | Mar. 2 | Do. |

*Reports received up to May 1, 1911*—Continued.

| Title. | Date of report. | Author. |
|---|---|---|
| CHILE—continued. | | |
| | 1911. | |
| Theater and school furniture | Mar. 7 | A. A. Winslow, Consul, Valparaiso. |
| Law removing duty on chloride of platinum | ...do..... | Do. |
| Special tariff report | ...do..... | Do. |
| Chilean development | ...do..... | Do. |
| Tungsten deposits | Mar. 13 | R. Hanna, Consul, Iquique. |
| DOMINICAN REPUBLIC. | | |
| Lands, cattle, and use of automobiles | Mar. 27 | P. E. Holland, Consul, Puerto Plata. |
| Breakfast foods | Mar. 30 | Do. |



THE PRESIDENTIAL PALACE, GUATEMALA.

Elaborate floral and electrical decorations at the inauguration of President Estrada Cabrera, March 15, 1911.

| | | |
|---|---|---|
| ECUADOR. | | |
| Vegetable ivory | Mar. 3 | H. R. Dietrich, Consul, Guayaquil. |
| Animal bones and offal for fertilizers | Mar. 6 | Do. |
| Cutting of mahogany trees | Mar. 22 | Do. |
| Origin of flour imports | Mar. 23 | Do. |
| GUATEMALA. | | |
| Plows | Mar. 22 | Geo. A. Bucklin, jr., Consul General, Guatemala City. |
| Children's shoes | Mar. 29 | Do. |
| Most promising goods to import into Guatemala | Mar. 30 | Do. |
| Agricultural implements | Mar. 31 | Do. |
| Jewelry | Apr. 3 | Do. |
| HONDURAS. | | |
| Water meters | Feb. 4 | A. T. Haeberle, Consul, Tegucigalpa. |
| Declared exports to the United States, 1909 and 1910 | Feb. 24 | Do. |
| Small 3-wheeled motor cars | Mar. 28 | Do. |
| Animal bones and fish offal, dried | ...do..... | Do. |

*Reports received up to May 1, 1911*—Continued.

| Title. | Date of report. | Author. |
|---|---|---|
| HONDURAS—continued. | | |
| | 1911. | |
| The use of alcohol in Puerto Cortes consular district | Mar. 30 | J. H. Watts, Vice Consul, Puerto Cortes. |
| Rate of exchange | Apr. 1 | Do. |
| MEXICO. | | |
| Typewriters | Mar. 14 | S. E. Magill, Consul, Guadalajara. |
| Wood alcohol | Mar. 17 | Do. |
| Cans for packing | ...do..... | Geo. A. Wiswall, Consu Cananea. |



STREET IN FRONT OF PRESIDENTIAL PALACE, GUATEMALA.

Festoons and arches leading up to the Presidential Palace during inauguration festivities.

| | | |
|---|---|---|
| Industrial and agricultural products of Tabasco | Mar. 18 | A. J. Lespinasse, Consul Frontera. |
| Drugs and patent medicines | ...do..... | Do. |
| Terra-cotta statues, sun dials, urns, etc., for gardens | ...do..... | Do. |
| Wood alcohol | ...do..... | Alexander V. Dye, Consul, Nogales. |
| Motors and motor boats at Vera Cruz | Mar. 22 | Wm. W. Canada, Consul, Vera Cruz. |
| Turpentine and rosin | Mar. 23 | Do. |
| American investments in Sinaloa | Mar. 24 | W. E. Alger, Consul, Mazatlan. |
| Imports into the Ciudad Porfirio Diaz, Mexico, consular district, from all countries during year ended Dec. 31, 1910. | ...do..... | L. T. Ellsworth, Consul, Ciudad Porfirio Diaz. |
| Imports into the Ciudad Porfirio Diaz, Mexico, consular district, from the United States of America for the year ended Dec. 31, 1910. | ...do..... | Do. |
| Wood alcohol | ...do..... | G. B. Schmucker, Consul, Ensenada. |
| Glass and plate-glass trade—duty | Mar. 25 | Arnold Shanklin, Consul General, Mexico City. |
| Port Lobos Railway—change in concession | Mar. 28 | A. V. Dye, Consul, Nogales. |
| Corn market in San Luis Potosi | ...do..... | W. L. Bonney, Consul, San Luis Potosi. |

*Reports received up to May 1, 1911*—Continued.

| Title. | Date of report. | Author. |
|---|---|---|
| MEXICO—continued. | | |
| | 1911. | |
| Packing for export, No. II | Mar. 28 | S. E. Magill, Consul, Guadalajara. |
| Wood alcohol | ...do | L. Hostetter, Consul, Hermosillo. |
| Corsets | Mar. 29 | A. B. Garrett, Consul, Nuevo Laredo. |
| Do | ...do | S. E. Magill, Consul, Guadalajara. |
| Trade opportunities | Mar. 30 | Arnold Shanklin, Consul General, Mexico City. |
| Commerce and industries | ...do | A. B. Garrett, Consul, Nuevo Laredo. |
| Brick-making machinery | Mar. 31 | M. S. MacCarthy, Consular Agent, Alamoz. |
| Oil industry of Gulf Coast section—development | ...do | C. A. Miller, Consul, Tampico. |
| Data regarding town of Topolobampo | Apr. 2 | W. E. Alger, Consul, Mazatlan. |
| Exporting cattle | Apr. 5 | J. H. Johnson, Consul, Matamoros. |
| Aguacates | Apr. 7 | A. V. Dye, Consul, Nogales. |
| Wood alcohol in San Luis Potosi | Apr. 8 | W. L. Bonney, San Luis Potosi. |
| Aguacate seed | Apr. 13 | P. C. Hanna, Consul General, Monterey. |
| NICARAGUA. | | |
| Wood alcohol | Mar. 25 | S. T. Lee, vice consul, Bluefields. |
| PANAMA. | | |
| Wood alcohol | ...do | J. C. Kellogg, consul, Colon. |
| Value of imports into Colon | Mar. 28 | Do. |
| PARAGUAY. | | |
| Market for typewriters | Feb. 17 | C. Ferris, consul, Asuncion. |
| How to enter market with American goods | ...do | Do. |
| PERU. | | |
| A new Peruvian steamship | Mar. 9 | W. H. Robertson, consul general, Callao. |
| URUGUAY. | | |
| Reduction of certain telegraph rates in Uruguay | Mar. 1 | F. Landon Goding, vice consul, Montevideo. |
| Ornametal hardware | Mar. 6 | Do. |
| Movement of vessels in Port of Montevideo, during the year 1910 | Mar. 7 | Do. |
| Reduction of cable rates in Uruguay | Mar. 8 | Do. |
| Prices of beer in Uruguay | ...do | F. Goding, consul, Montevideo. |
| VENEZUELA. | | |
| Direction of customhouses—Caracas | Feb. 6 | Herbert R. Wright, consul, Puerto Cabello. |
| Conditions at Ciudad Bolivar and in Venezuelan Guiana | Mar. 20 | I. A. Manning, consul, La Guaira. |
| Report on sugar refinery for Venezuela | Mar. 23 | H. R. Wright, consul, Puerto Cabello. |
| Arms and ammunition | Mar. 28 | I. A. Manning, consul, La Guaira. |
| Imitation American prints in Spanish America | Mar. 29 | Do. |
| Increase of exports from and imports into Venezuela | Apr. 3 | Do. |
| Market for wire rope | ...do | Do. |
| Wood alcohol | ...do | Do. |

# ARGENTINE REPUBLIC

## CUSTOMS REVENUES IN 1910.

The total receipts of the Argentine Government for customs duties in 1910 amounted to $82,902,746 Argentine gold,[a] or an increase of $10,167,268, over the corresponding customs revenues of the preceding year.

These were received from the following sources:

| | |
|---|---|
| Specific and ad valorem import duties | $72,031,436 |
| Collections from surcharges | 4,002,211 |
| Export duties | 3,902 |
| Miscellaneous customs revenues | 6,865,197 |

Foodstuffs, tobacco, and beverages contributed the largest portion of the customs revenues, while the duty on the sugar importation was perhaps the largest single item of revenue. During 1910 refined sugar paid duties amounting to $1,677,334, while raw sugar paid $1,574,865.

## TOBACCO, SUGAR, AND WINE PRODUCTION OF SALTA IN 1910.

There were 1,032 plantations devoted to tobacco culture in the Province of Salta, Argentine Republic, in 1910, representing a cultivated area of 2,431 hectares,[b] and a total of 50,000,000 plants. The tobacco crop during the year referred to amounted to 2,300,000 kilos [b] of leaf tobacco. Of this amount 2,100,000 kilos were exported, 60,000 kilos utilized in the tobacco factories of the Province, and a surplus left amounting to 140,000 kilos.

The production of sugar in the Province of Salta in 1910 was 1,140,300 kilos, and the production of wine 3,500,000 liters.[b]

## BUDGET OF PROVINCE OF BUENOS AIRES FOR 1911.

The budget for the Province of Buenos Aires for 1911 shows that the bond issue covering the internal and foreign indebtedness of that Province amounts to $406,627,818.17 national currency. Of this sum bonds to the amount of $56,876,951.47 have been redeemed, leaving $349,750,866.70 national currency still in circulation. The present unpaid debt of the Province requires an annual interest service of $16,974,068 national currency.

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[a] All values here expressed in the Argentine gold peso, equivalent to $0.965 United States gold.

[b] Hectare equivalent to 2.471 acres; kilo, 2.204 pounds; liter, 1.056 quarts.

## PAPER MONEY IN CIRCULATION.

The following table shows the amount of paper money in circulation in the Argentine Republic from 1901 to 1910, inclusive:

| | Population. | Pesos, national currency. | | Population. | Pesos, national currency. |
|---|---|---|---|---|---|
| 1901 | 4,640,939 | 290,737,961 | 1906 | 5,377,639 | 518,108,104 |
| 1902 | 4,773,568 | 290,644,758 | 1907 | 5,546,106 | 532,158,265 |
| 1903 | 4,910,849 | 292,605,235 | 1908 | 5,712,908 | 571,235,746 |
| 1904 | 5,058,792 | 407,033,782 | 1909 | 5,884,295 | 674,321,934 |
| 1905 | 5,214,974 | 490,750,652 | 1910 | 6,060,825 | 704,044,771 |

## BANKS OF BUENOS AIRES AT CLOSE OF 1910.

At the close of the year 1910, the statements issued by the banks in the City of Buenos Aires indicates a healthy condition in the management of financial affairs, and showed the following distribution of its resources:

| | Argentine (gold). | Argentine (currency).[a] |
|---|---|---|
| Deposits | $32,643,225 | $1,263,425,040 |
| Discounts and advances | 33,928,246 | 1,250,922,007 |
| Cash on hand | 66,711,363 | 323,152,328 |

[a] Paper pesos equivalent to $0.4246 United States gold.

## CONSTRUCTION OF RESERVOIRS IN THE PROVINCE OF JUJUY.

A recent governmental decree approves the plans submitted for the construction of the dams or reservoirs known as "Las Maderas" and "La Cienaga" in the Province of Jujuy, Argentine Republic, at an estimated cost of $7,998,000 national currency. "La Cienaga" reservoir will be constructed by the Government, under the direction of the Irrigation Board, at an estimated cost of $1,445,000 national currency.

## DRILLING MACHINERY FOR COMODORO RIVADAVIA OIL FIELDS.

The Petroleum Co., of Comodoro Rivadavia, has received a complete modern outfit of drilling and pumping machinery, said to be the most powerful of its kind ever brought into the Argentine Republic. The towers, which were specially designed for the Comodoro Rivadavia oil fields, are of steel, 72 feet high, coupled to standard California oil rig drilling machines and capable of driving a 14-inch pipe to a depth of 3,500 feet.

## CORRIENTES, DODERO AND GENERAL PAZ RAILWAY.

The railway recently constructed from Corrientes to Dodero and General Paz has been opened to traffic, thereby affording direct freight and passenger service between Buenos Aires to General Paz.

# BOLIVIA

## INCORPORATION OF CITIES.

An executive decree provides that to be incorporated a city, a town, or village in Bolivia must have a population of at least 10,000 inhabitants, and contain primary schools with no less than 500 pupils in attendance. The decree does not affect cities and towns incorporated previous to this order, but confers the rank of cities on all the capitals of the Departments.

## STATISTICAL DATA.

In 1910 the Republic of Bolivia imported merchandise to the amount of 113,323,552 kilos, and collected duties on the same aggregating 5,491,614 bolivianos.[a] Compared with the 95,417,742 kilos of merchandise imported in 1909, on which duties were collected to the amount of 4,714,929.33 bolivianos, the year 1910 represents an increase in weight and receipts from duties, respectively, of 17,905,810 kilos and 776,685.10 bolivianos.

The exports in 1910 consisted of 58,633,530 kilos of products, as compared with 43,673,612 kilos in 1909, or an increase of 959,918 kilos. The duties collected from exports in 1910 aggregated 3,433,996.63 bolivianos, as against 2,619,611.79 bolivianos in 1909, also showing an increase of duties over the latter year of 814,387.84 bolivianos.

The receipts from export and import duties in 1910 were estimated in the budget at 9,079,100 bolivianos, while the actual receipts for the year, not including those from the Abuna customhouse, were 8,682,685.32.

## EXPORTS FROM SAN FRANCISCO TO BOLIVIA, FIRST QUARTER 1911.

Through the courtesy of Señor Don Ignacio Calderon, Bolivian Minister at Washington, the Bulletin has been furnished with figures showing the exports from San Francisco, California, to the Republic of Bolivia during the first three months of 1911. These amounted to $247,062.46, and consisted of the following articles:

| | |
|---|---|
| Flour | $226,028.20 |
| Lumber | 8,660.39 |
| Powder | 4,000.00 |
| Gasoline | 1,150.00 |
| Miscellaneous | 7,223.87 |
| Total | 247,062.46 |

[a] The boliviano is estimated at about $0.40 United States gold.

## INTERNAL DEBT IN 1910.

The internal debt of Bolivia on January 31, 1910, according to statistics published by the Department of Finance of the Bolivian Government, amounted to 5,828,070.79 bolivianos. The bonds issued by the Republic up to December 31, 1910, aggregated 4,178,966.02 bolivianos, of which amount 1,649,104.77 bolivianos remained unpaid.

## SALE OF COINED SILVER AND IMPORTATION OF GOLD COIN.

On September 28, 1910, a contract was made by the Government of Bolivia with the six principal banks of the Republic to collect the silver coin in circulation of the mintage of 23.9 grams fine. The total amount of this currency collected by the banks aggregated 1,444,-319.30 bolivanos ($577,727.72). All of this will be shipped to Europe and sold, and the proceeds therefrom invested in gold, which will be brought to Bolivia for circulation.

## NORMAL AGRICULTURAL AND INDUSTRIAL SCHOOL.

The Normal Agricultural and Industrial School of the Republic of Bolivia is soon to be installed in the neighborhood of Sopocachi. A course of study covering a period of two years has been arranged, and graduates will receive the title of traveling agricultural instructors. The Government intends to assign the graduates of this school to duty on the high table-lands in the interior of the country.

## DISCOVERY OF COAL DEPOSITS.

An extensive deposit of coal has been discovered on the Quilcoma plantation in Bolivia, near the Ayoayo Railway. Examination of the deposit and analyses of its coal are reported to have given excellent results. It is now proposed to organize a company for the development of these fields.

## QUILLACOLLO TO CLIZA ELECTRIC RAILWAY.

The Quillacollo to the Valley of Cliza electric railway, with terminal stations at Vinto and Arani, has a total length of 90 kilometers. The construction of the first section of this important electric line has been completed and work on the second section, which will extend to the fertile and beautiful Cliza Valley, will soon be begun. The survey of this railway extends in an easterly direction to Las Cuadras, and from there runs southward to the Cliza Valley, crossing the public highway at Angostura. The completion of this much needed electric railway will greatly accelerate the development of the rich country through which it passes and will exert a beneficial influence on the agricultural and mining industries of the neighboring regions.

# BRAZIL

### NEW FEDERAL LOAN.

The Federal Government entered into a contract with Messrs. Rothschild & Sons, of London, on April 3 last, for a loan of £4,500,000. The bonds will be issued at 92, with annual interest at 4 per cent, payable semiannually. The loan is to be applied to the port works of Rio de Janeiro. This is the third loan the Brazilian Government has contracted for this purpose, the first being in 1903, for £5,500,000, at 90, interest 5 per cent; and the second in 1905, for £3,000,000, at 97, and interest 5 per cent. The terms of the present loan are the most favorable of any which the Government has yet obtained.

### NEW BOND ISSUE AUTHORIZED.

The President of the Republic issued a decree on March 29, 1911, authorizing the Finance Minister of Brazil to issue bonds to the amount of 30,000,000 milreis. The proceeds of this issue will provide funds for the payments due to the contractors of the Madeira-Mamore Railway, the Sao Luiz-Caxias Railway, the extensions of the Sobral and Rio Grande do Norte Central lines, and various other connecting lines under construction in the States. The bonds will be of the par value of 1,000 milreis and will bear 5 per cent interest, payable semiannually. Amortization will be at the rate of one-half per cent per annum.

### FOURTH BRAZILIAN ESPERANTO CONGRESS.

The Fourth Esperanto Congresso of Brazil was held at Juiz de Fora from April 21 to 23 last. It is reported to have been the most successful congress thus far held.

### VISIT OF AGRICULTURAL COMMISSIONER TO THE UNITED STATES.

Dr. Gastão Netto dos Reys, an official of the Department of Agriculture of Brazil, has been commissioned by that department to make a visit, during the coming summer, to the United States, Central America, Mexico, and the Republics of the west coast of South America, with the object of interesting capitalists in these countries in the commercial and industrial possibilities of Brazil.

### PLAN FOR THE VALORIZATION OF SUGAR.

A meeting of sugar-cane growers and sugar manufacturers of Brazil was held at Rio de Janeiro, on April 4 last, to consider means for maintaining a steady level in the price of this product. At this meeting it was decided to recommend the levying of a special export duty of 55 reis per kilo, the revenue from which should be employed in purchasing the surplus production, so as to prevent an undue

depression in prices. The sugar crop of Brazil averages 4,500,000 bags of 60 kilos each, of which about 3,000,000 bags are consumed in the country, leaving 1,500,000 bags for export.

### PROPOSED NAVIGATION SERVICE FOR BRAZIL.

It is hoped that before long announcement will be made of the successful bidder for the establishment of a navigation service on the rivers of the States of Para, Amazonas, and the Acre Territory. The time limit for the presentation of bids fixed by the Minister of Public Works expired April 20, 1911. Estimates were requested covering the establishment of nine distinct services between the States named. The successful concessionaire will receive an annual subsidy of 437,121,700 milreis, payable monthly.

### NEW TRANSATLANTIC CABLE SERVICE.

The work of laying the German cable between Recife, Brazil, and Moravia, Liberia, via Teneriffe, was begun on March 8 last, and the line was formally inaugurated in April. On this occasion telegrams of felicitation were exchanged between President HERMES DA FONSECA and Emperor WILLIAM.

The company promises to make a reduction on the regular rates of 75 centimes per word, and it is probable that the competing lines will make similar reductions. This should lower the rate at which cable dispatches can be sent to Germany, Belgium, France, and England, to 2,530 reis per word, 2,730 reis per word to Italy, and 2,820 reis to other countries of Europe and the United States.

### REPORT OF SAO PAULO TRAMWAY, LIGHT AND POWER CO. FOR 1910.

The report of the Sao Paulo Tramway, Light and Power Co. (Ltd.), for 1910, shows gross earnings totaling $2,249,292, and operating expenses $962,337, leaving net earnings $1,986,955. Quarterly dividends at the rate of 10 per cent per annum have been declared.

### REPORT OF SAO PAULO RAILWAY CO.

The report of the Sao Paulo Railway Co. for the half-year ending December 31, 1910, fixes the receipts at £1,218,357, and operating expenses at £611,060, leaving a net revenue of £607,297, as against £743,077 in 1909. The directors declared a dividend of 2½ per cent on the preferred stock (at the rate of 5 per cent per annum) and on the common stock a dividend of 5 per cent (at the rate of 10 per cent per annum), together with a bonus of 1 per cent. During the last ten years the dividend of this company has never been less than 12 per cent per annum.

### EXTENSION OF TIME FOR COMPLETION OF SOBRAL RAILWAY.

The Brazilian Government has extended by 18 months the time specified for the completion of the Itu-Cratheus section of the Sobral Railway.

# CHILE

## REAPPORTIONMENT OF SENATORS AND REPRESENTATIVES.

A law was enacted at the extra session of the Congress of Chile January last reapportioning the number of Senators and Representatives in accordance with the population as shown by the new census. According to this apportionment the next Congress of Chile will be composed of 37 Senators and 108 Representatives, distributed as follows:

| Provinces. | Senators. | Representatives. | Provinces. | Senators. | Representatives. |
|---|---|---|---|---|---|
| Tarapaca | 1 | 4 | Maule | 2 | 5 |
| Antofagasta | 1 | 4 | Nuble | 2 | 6 |
| Atacama | 1 | 3 | Concepcion | 3 | 8 |
| Coquimbo | 2 | 7 | Arauco | 1 | 3 |
| Aconcagua | 2 | 5 | Bio-Bio | 1 | 4 |
| Valparaiso | 3 | 10 | Malleco | 1 | 4 |
| Santiago | 6 | 17 | Cautin | 1 | 4 |
| O'Higgins | 1 | 3 | Valdivia | 1 | 4 |
| Colchagua | 2 | 6 | Llanquihue | 1 | 4 |
| Curico | 1 | 4 | Chiloe | 1 | 4 |
| Talca | 2 | 5 | | | |
| Linares | 1 | 4 | | 37 | 108 |

## AUTHORIZATION FOR VARIOUS LOANS.

The Congress of Chile, which met during January, authorized the President of the Republic to negotiate loans aggregating £9,905,000, the proceeds of which are to be used in the following manner:

| | |
|---|---|
| Naval purchases | £4,480,000 |
| Renewal of artillery material | 500,000 |
| Paving street and slaughterhouse at Santiago | 600,000 |
| Reconstruction of Valdivia | 50,000 |
| Port works at Valparaiso and San Antonio | 4,275,000 |
| Total | 9,905,000 |

## SAVINGS BANKS AND PENSIONS FOR STATE-RAILWAY EMPLOYEES.

A bill was introduced in the Congress of the Republic of Chile during the January session for the establishment of a special savings bank and pension system for employees of the State railways. This measure, which has been approved by the Senate, provides for the raising of funds for the savings bank in the following manner: Five per cent of the earnings of employees; fines levied on employees for the improper performance of their duties; receipts from advertisements in railway stations; unclaimed wages of employees; and 0.0015 per cent of the receipts of the State railways. The bank

is to be managed by an administrator and board of directors composed of five members, two of whom shall be the Director General of Railways and the Administrator of the second section of the central railway system.

Pensions will be granted to persons who have served the State railways 10 years or over and who have become incapacitated for service. Employees completely disabled because of injuries sustained during the performance of duties in the employ of the State railways are entitled to a pension for life at full salary, and employees temporarily incapacitated are entitled to full salary during convalescence for a period not exceeding six months.

### EXCHANGE OF DIPLOMATIC CORRESPONDENCE WITH URUGUAY.

The protocol, signed by the representatives of the Governments of Uruguay and Chile, for the exchange of diplomatic correspondence between these two nations, was duly approved by Chile in January of the present year.

### GIFT TO ARGENTINA.

The appropriation for the Department of Foreign Affairs of the Republic of Chile contains an item of 325,000 pesos for the settlement of the balance due on the Nieto Palace, on Vicuña Mackenna Avenue, Santiago. It is proposed to present this property to the Argentine Government to be used as the seat of its legation in Santiago.

### ESTIMATED PRODUCTION OF NITRATE IN 1911.

The estimated production of nitrate for 1911 is 55,000,000 quintals. Six new nitrate establishments are now in process of construction in the Province of Tarapacá, one in the Province of Tocopilla, and two in the Province of Antofagasta. It is probable that none of these will begin operations until 1912.

The accompanying table shows the production, exportation, and consumption of nitrate for the years 1906 to 1910, inclusive:

| Years. | Production. | Exportation. | Consumption. |
|---|---|---|---|
| | *Quintals.* | *Quintals.* | *Quintals.* |
| 1906 | 39,611,000 | 37,564,000 | 37,610,000 |
| 1907 | 40,131,000 | 36,000,000 | 37,797,000 |
| 1908 | 42,847,000 | 44,585,000 | 39,923,000 |
| 1909 | 45,890,000 | 46,412,000 | 44,482,000 |
| 1910 | 53,595,000 | 50,781,000 | 51,296,000 |

### BRANCH OF MERCANTILE BANK OF BOLIVIA AT ANTOFAGASTA.

The Mercantile Bank of Bolivia, with a working capital of 3,000,000 bolivianos ($1,200,000), proposes to establish a branch bank at Antofagasta, Chile, in order to facilitate and increase the commerce of that port with the Republic of Bolivia. This bank has a reserve fund of 220,000 bolivianos ($88,000), and has been authorized to increase its capital to £1,000,000.

### AGRICULTURAL, MINING, AND INDUSTRIAL SCHOOLS.

For the purpose of improving and extending the scope of the agricultural, mining, and industrial institutions of the country, the President of Chile has established a Board of Technical Instruction. The members of the committees which had been appointed to supervise the Technical School of Arts and Crafts, the Industrial School for Men, the Agricultural Institute, the practical schools of mines, and the girls' professional schools are included in this new board.

### DOCK AT PORT OF TALCAHUANO.

The commission appointed by the President of Chile to prepare plans and specifications, and request estimates for the construction of a dock at the port of Talcahuano, has received six bids, ranging from ₱9,949,587 Chilean gold to ₱13,450,000 Chilean gold. The lowest bid was submitted by Luis Lagarrique, who proposes to complete the construction work within the term of five years.

### WATERWORKS FOR VALLENAR.

The enterprising city of Vallenar, situated in the Province of Atacama, Chile, is soon to be provided with waterworks. The contract has already been awarded, and active steps are now in progress for the speedy construction of the works.

### STEAMSHIP SERVICE TO ITALY.

It is reported that the arrangements for the establishment of a direct steamship service between Chile and Italy are nearly completed, and that the interested Governments are to appoint a special committee to finally pass upon the matter as presented to it.

## COLOMBIA

### SERVICE OF THE FOREIGN DEBT.

Under a presidential decree issued on February 27 last, the Colombian Consulate General in London will hereafter collect the monthly receipts from all the Colombian consulates in Europe. These revenues, together with the £12,000 from the Cartagena and Barranquilla customhouses, will be devoted by the consulate to the payment of the external debt of Colombia. This important measure is in accord with the avowed policy of President RESTREPO'S administration to meet the obligations of the Republic faithfully and punctually and of rehabilitating its credit abroad.

## REPORT OF THE BANCO CENTRAL.

The report of the Banco Central, the leading financial institution in Colombia, appeared on February 1, 1911, and credit is due to Señor JORGE HOLGUIN, under whose direction it was prepared, for the detailed treatment of the conditions existing throughout the different departments of the Republic.

In each department, says the report, a sound and steady progress prevails. In the Department of Magdalena, the banana plantations are being developed to such an extent that during the last four years the exports of this fruit have increased over threefold, with every indication for a still greater increase in the current year. The Department of Cauca has also enjoyed a similar growth in the production of cacao, coffee, and sugar cane, while the cattle industry is assuming larger proportions than heretofore.

The report then deals with the Pacific Railroad (Ferrocarril del Pacifico). According to Señor HOLGUIN, this line, when completed, will solve the problem of surplus production by affording an outlet to foreign markets. On the date of this report, the rails had been laid as far as Cresta de Gallo, and in all probability will reach Cali by the latter part of the year. When completed the trip from Cali to Buenaventura, the starting point of the railroad, will be covered in six hours.

With reference to the Department of Antioquia, Señor HOLGUIN states, that, as a result of the energy and activity of its inhabitants, two railroads are at present being constructed in that section of the Republic. One is the line called the Puerto Berrio Railroad, and the other, a railway from Medellin to the Amaga coal district, on the Cauca River, a small section of which line is already in operation. These lines are being pushed forward rapidly, and it is expected to throw them open to traffic within two years. The completion of these lines will give Medellin a most important position in the cities of the Republic, as already this city is showing wonderful progress.

The report then points out the development of the gold and silver mines in this department, stating that the exports of gold, from this region alone, amounted to nearly $6,000,000 during the year 1910. Nor is this the only productive industry of Antioquia, observes Señor HOLGUIN, for during the year 1910 the cultivation of coffee had risen to such an extent that nearly $8,000,000 worth of coffee was exported, while hides, ivory nuts, and rubber also formed considerable items in the exportation figures of the country.

Like progress and activity obtains in the other department, according to Señor HOLGUIN, and ample opportunity exists for profitable exploitation and development of the immense resources of the country.

Commenting on the condition of the bank, the report states that at the close of December, 1910, the cash and convertible assets on hand amounted to $1,369,722 gold. The net profits for the second half of 1910, after deducting the reserve and contingent funds, amounted to ₱ 11,173,750 paper, representing an annual dividend of 14 per cent to stockholders.

### PROGRESS AT MEDELLIN.

The BULLETIN is in receipt of an interesting communication from the United States Consular Agent SILAS H. WRIGHT, located at Medellin, in which he speaks most enthusiastically of the progress of that city. He says, in part:

The population of Medellin to-day is about 75,000, including suburbs and the valley itself. Local industries are very rapidly increasing, owing to the increased railroad facilities, and will continue to advance in proportion to same. The mining industry is also increasing notably and especially so through foreign capital coming in here to a large extent. The exportation of "Panama" hats, manufactured in many of the smaller towns of the department, is also increasing and bids fair to become a permanently important industry. The people are exceptionally industrious and peaceful, and the local government a progressive one, all of which tends toward advancement and prosperity.

### NEW WIRELESS STATIONS.

The Government of Colombia has announced its intention of establishing several new wireless stations throughout the Republic, thus placing it in direct and rapid communication with the West Indies, Panama, and Venezuela. The stations will be erected at Bogota, Medellin, and Cartagena, and contracts have already been concluded with the Marconi Co. for this work.

## COSTA RICA

### DUTIES ON RUBBER PRODUCTS.

By decree of President JIMENEZ of March 16, 1911, rubber tires for automobiles, carriages, and bicylces, whether pneumatic or not, and also rubber solution or cement used for repairing tires, will be dutiable in the customhouses at 15 centimos of a colon per kilo, about $3\frac{1}{5}$ cents United States per pound.

# CUBA

## MESSAGE OF PRESIDENT GOMEZ.

In this document the President first alludes to the partial elections of last November, and states that the manner in which these were conducted indicates that the shaping of the powers is governed by a high standard of justice and respect for the popular will.

He then asserts that the Republic is not confronted with real problems of a political nature, but that the great and actual questions affecting the country are of an economic character. For this reason he has always favored every industrial or commercial innovation, and has adhered strictly to an essentially economic policy. During the last two years of his administration the public debt has been considerably diminished. The so-called Revolution 6 per cent bonds amounted originally to $2,196,585; of this sum, $1,464,585 have been repaid, in accordance with the contract entered into with Speyer & Co., of New York. Therefore, according to the message, there remains a balance of $732,000, which falls due on October 1, 1911, and the bankers have already been instructed to recall these bonds in due season.

The 5 per cent bonds of the internal debt amount to $10,874,100, which debt is being canceled at the rate of $50,000 per annum. The President recommends that this yearly amount be increased in order to cut down the interest. On these bonds, interest amounting to $2,758,827 have been paid, and on account of the principal, $248,500 have been paid, or a total of $3,007,327.

Of the $35,000,000 loan $1,020,000 have been paid on the principal. This, the President says, makes a total reduction of the national debt of $3,465,085.

The message then states that peace and order have prevailed throughout all sections of the island; the railroad lines have been and are being extended to a degree never before recorded in the history of the country, thus opening up remote sections and placing them on the way to prosperity and progress; much-needed highways have been constructed; ports improved; canals, wharves, public buildings and workingmen's houses built; agricultural schools are being organized; the banks are in a flourishing condition, and the territorial bank is operating under the most favorable circumstances. The aid given to agriculture by this institution is mentioned as being an important factor toward the development of the wealth of the country. "In a word," says President Gomez, "it affords me real gratification to be able to repeat on this occasion that the general condition of the Republic is one of the fullest prosperity, all the

elements of its marvelous wealth—a splendid exponent of which has been the recent National Exposition of Agriculture, Industry, Art, and Women's Fancy Work—is being developed under the fostering shadow of peace and order."

The message further indicates that, in spite of unfavorable weather conditions, the next sugar crop is likely to exceed the previous one, both in volume and in prices. The present administration, fully realizing that the Cuban soil with a little irrigation during the dry season can yield much more than its present production, is devoting its best attention to devising a system that will best be suited to the needs of the country.

Referring to public health, the President mentions the fact that the Government is being constantly congratulated by the great influx of visitors and tourists upon the magnificent sanitary conditions.

The relations which Cuba maintains with foreign nations are, as the chapter on the Department of State points out, extremely cordial. On March 17 last the Secretary of State and the Minister from Germany exchanged the ratifications of the convention of postal money orders between the two countries. The arbitration treaty with Brazil and the extradition treaty with Venezuela are awaiting similar procedure.

Under the heading of the Department of the Interior the President reports that order has been maintained uninterruptedly, and in support of his assertion mentions the perfect tranquillity under which the sugar crop is being gathered.

Commenting upon the Department of Communications, the President says that the present system of parcel-post exchange with foreign countries is too expensive, and the adhesion of the Republic to the Parcels-Post Convention of the Universal Union is now being negotiated. The reduction of postage rates between Cuba and Spain is also under discussion.

There have been opened to the public 51 new post offices, which, together with the 463 existing at the time, make a total of 514, and a greater number of postal and telegraph offices will soon be established. The postal routes have been increased to 105, the annual distance covered being 200,000 kilometers. For these improvements, the message declares, the important branches of the Cuban Railroad, from Manzanillo to Bayamo, from Bayamo to Marti (Camaguey) and to Palma Soriano, are largely responsible. On February 1 last there were placed in circulation the two new kinds of postage stamps of the denominations of 8 cents and $1. On the same date were also placed on sale the new issue of postage stamps of the denominations of 1, 2, 3, 5, 8, 10, and $1 and the 10-cent special-delivery stamps.

With reference to the Department of Finance, the Executive reports that, under a decree dated the 16th of January last, the

Bureau of Immigration was transferred to the Department of Public Health and Benificence.

The message also advises that the collection of the special tax on liquors, created for the purpose of paying the interest and principal of the $35,000,000 loan, yielded during the four months, November to February, an increase of $85,022.56 over the corresponding period of the previous fiscal year.

Payments on the national debt will continue with the ordinary and special revenues devoted to it. The condition of the Treasury on March 31, 1911, showed a balance on hand of $1,649,914.74. There was a monetary movement through the Treasury during the five months, November to March, amounting to $20,592,079.71, offset by disbursements totaling $17,385,790.39. The collection of revenues continues to increase; during the four months, November to February, there was an excess of $917,292.14 over the corresponding period of last year; this sum, together with $82,136.84 received from taxes, makes a total excess in favor of the current year of $999,428.98.

In regard to public works, the Executive reports that with the additional appropriations passed by Congress, considerable progress was made possible. During the period under review, $458,259 have been spent in construction of highways and bridges. Already 39,314 meters of roadway are completed, with several thousand more in process of construction. In nearly all the provinces of the Republic various public improvements are under way. From November, 1910, to February, 1911, the Division of Waters, Sewers, and Municipal Engineering of Havana has invested the sum of $1,339,656.77 in the various works under its charge.

Under the heading of the Department of Agriculture, Commerce and Labor, a detailed account is given of the National Exposition of Agriculture, Industry, Art, and Women's Fancy Work and of the great success it achieved.

Referring to the wealth of the Cuban forests, the President states that the Department of Agriculture presented at the Exposition an exhibit containing 200 different species and 256 specimens of woods; he takes occasion to again recommend the passage of laws regulating the exploitation of public and private forests, in order to prevent their destruction. The cultivation and utilization of textile plants is, according to the message, also being rapidly developed.

With respect to public instruction, the message reports that school savings banks have been created and are now operating with satisfactory results; that the national and several public libraries have been organized; that the general organization of the teaching system is being completed, and the codification of the laws affecting public instruction will soon be published.

On February 3, 1911, the number of pupils registered in the public schools was 152,658, distributed over the 3,774 day schools throughout the island. Of the total number of children, 79,762 were boys, and 72,896 girls. The average daily attendance was 105,774 (55,331 boys and 50,443 girls), or 96.28 per cent. The number of teachers in the day schools is 3,856.

The enrollment of pupils in the night schools created under a decree of September 23, 1910, was 1,318 pupils, with a daily attendance of 754, or 57.20 per cent.

In the private schools of the Republic the number of pupils enrolled was 24,434—12,436 boys and 11,898 girls.

Finally, the President extends his congratulations to the Department of Health and Beneficence on the Grand Prize of Honor which was awarded to it by the First International Spanish Congress on Tuberculosis, for the splendid exhibit of its work and the excellent sanitary condition of the Republic.

The following are among the most important recommendations made to Congress by President GOMEZ: Adoption of a plan of railroad and road construction; enactment of laws promoting commerce; construction of aqueducts; protection of local industries by temporary exemption from taxes; holding of national expositions under Government auspices, and the encouragement of immigration.

### IRRIGATION COMMISSION NAMED.

President GÓMEZ has signed a decree designating DAVID C. HENRY, of the United States, GEORGE H. WINIGAN, of England, and EDUARDO GIBERGA, of Cuba, to constitute the commission which is to study the possibilities of irrigation in the Province of Pinar del Rio.

Messrs. HENRY and WINIGAN are irrigation experts, and Doctor GIBERGA is the Dean of the Engineering School of the University of Havana.

## DOMINICAN REPUBLIC

### THE REPORT OF THE SECRETARY OF FINANCE.

The "Gaceta Oficial" for March 29, 1911, publishes in full the text of the report which Sr. FEDERICO VELÁZQUEZ H., Secretary of Finance and Commerce, submitted to the President of the Dominican Republic. This important document reviews in detail the transactions of his department during the year 1910.

## FISCAL REVENUES AND EXPENDITURES.

The total amount of revenues received during the year 1910 was $4,705,738.20 gold, derived from the following sources:

| | |
|---|---|
| Customs revenues | $3,121,641.81 |
| Port dues | 60,366.02 |
| Tax on alcohol | 266,828.98 |
| Stamp tax | 127,356.37 |
| Postal revenues | 32,718.00 |
| Stamped paper | 78,613.64 |
| Telegraphs and telephones | 13,429.26 |
| New York consulate | 17,661.45 |
| Civil register | 4,326.56 |
| Public sales | 519.42 |
| Ria Ozama lighting | 2,258.64 |
| Leases | 854.57 |
| Central Railroad | 284,421.72 |
| Macoris Wharf | 148,732.70 |
| Puerto Plata Wharf | 67,726.30 |
| Azua Wharf | 15,133.04 |
| Monte Cristi Wharf | 7,915.59 |
| Mining tax | 222.80 |
| Reimbursements | 2,750.25 |
| Sold articles | 4,709.48 |
| Miscellaneous | 4,406.95 |
| Drafts on Morton Trust Co | 197,971.52 |
| Drafts on Guaranty Trust Co | 245,173.13 |
| Total | 4,705,738.20 |

The fiscal expenditures during the same year aggregated $4,645,287.43, distributed as follows among the different departments:

| | |
|---|---|
| Legislative power | $91,229.82 |
| Presidency | 20,958.76 |
| Judicial power | 92,345.00 |
| Interior and police | 670,453.55 |
| Foreign Relations | 106,546.54 |
| Finance and Commerce | 1,939,105.90 |
| War and Marine | 521,359.74 |
| Justice and Public Instruction | 299,522.25 |
| Agriculture and Immigration | 11,219.19 |
| Promotion and Communications | 238,929.40 |
| Refunded sums | 19,086.91 |
| Public works | 268,937.19 |
| National Palace | 27,747.21 |
| Purchase of property | 2,965.30 |
| Survey of San Pedro Macoris highway | 279.48 |
| Survey of lands | 118.50 |
| Amount refunded to E. A. Blanton | 5,000.00 |
| Miscellaneous payments | 65,116.56 |
| Cancellation of warrants of the Auditor General of Finance | 250,449.11 |
| Total | 4,645,287.43 |

The funds on hand at the different offices of the Department of Finance and at the Receivership General of Customs of the Republic on December 31, 1910, were as follows:

| | |
|---|---|
| Cash | $174,286.58 |
| Stamped paper | 165,604.86 |
| Internal-revenue stamps | 492,683.12 |
| Postage stamps | 156,509.63 |
| Accounts to be collected and other items | 10,610.81 |
| Total | 999,695.00 |

## MARITIME MOVEMENT.

The tonnage of vessels entering the Dominican Republic reached a total of 899,545, as against 913,729 in 1909, or a decrease of 14,184 tons.

The first place is held by American ships, with 344,132 tons; Germany follows with 275,794; France, with 97,312; Cuba, with 60,049; Norway, with 58,698; England, with 29,714; Spain, with 19,149; other countries, with 9,391; and the Dominican Republic, with 5,306.

## DEMOGRAPHIC STATISTICS.

The number of births recorded in the Civil Register during 1910 was 28,235, or an increase of 2,247 over the year 1909. The marriages performed throughout the Republic totaled 3,594, which represents an increase over the preceding year of 93 per cent. In 1910 the number of deaths was 6,576, as compared with 7,174 in 1909, a decrease of 598.

Although the census of the Republic has not as yet been taken, the population can be safely estimated, according to the Secretary of Finance, at 675,000 inhabitants. The total immigration through the different Dominican ports was 2,297.

## PUBLIC INSTRUCTION.

During the year 1910 the number of schools in the Republic was 526, against 481 in 1909, or an increase of 9 per cent. The school population is given at 18,812 children, which is equivalent to 2.78 per cent of the total population.

## THE CENTRAL RAILROAD.

Three years have now elapsed since the Government assumed the full control of the Central Railroad, and each succeeding year has shown a greater profit than the preceding one. This is a most gratifying indication of the progress and sound fiscal management of the administration of the Republic.

According to the accounts submitted by the company for the year 1910, the total gross receipts amounted to $284,421.72; of this total, $281,517.06 were received from freight and passenger traffic. The net earning of the line for the year aggregated $73,419.40, which

represents a 5½ per cent income on the estimated value of the road, including the Santiago-Moca branch.

The number of kilometers covered by passenger trains during the year totaled 59,762.

# ECUADOR

### PARTICIPATION IN VENEZUELAN CENTENARY CELEBRATION.

The Government of Ecuador has accepted the invitation of the Government of Venezuela to participate in its centenary celebration at Caracas, and will shortly send a delegation to Venezuela.

### VETERINARY DEPARTMENT AT MILITARY SCHOOL.

A veterinary department has been added to the Government's military school at Quito, under the direction of three Ecuadorian veterinarians who received their training in the schools of Chile. No pupil will be received into the school under 14 or over 22 years of age. The course of instruction will cover a period of two years, after which graduates will have the option of remaining in the army or devoting their time to private practice.

### STATUES TO JUAN MONTALVO AND VICENTE LEON.

The statue which is to be dedicated to the memory of Juan Montalvo, the distinguished Ecuadorian patriot and statesman, has been received from Europe and will shortly be unveiled with appropriate ceremonies in the public square of the city of Ambato. Preliminary steps have also been taken for obtaining a statue of the Ecuadorian philanthropist, Vicente Leon. When this statue is completed, it will be brought to the city of Latacunga and erected in the public square.

### DISCOVERY OF COAL IN CALACALI.

A coal mine has been discovered on the Yanayacu plantation, Calacali Parish, Ecuador. This deposit has been denounced, and steps have been taken to develop and exploit the property.

### TELEGRAPHIC COMMUNICATION BETWEEN NARANJAL AND CUENCA.

The municipality of Cuenca has contributed funds for the construction of a telegraphic line from Naranjal to Cuenca, which service will greatly add to the facilities for transacting business and will be a great benefit and convenience to travelers. It is quite probable that a telephone line will also be established between the points mentioned.

### LONG-DISTANCE TELEPHONE IN ECUADOR.

The long-distance telephone service in operation between Guayaquil and Quito, a distance by rail of 297 miles, is giving such excellent satisfaction that its use is becoming more general day by day. From a financial standpoint, too, has its success been marked, and the question is now being seriously considered of extending the long-distance connections from these two points throughout the length of the Republic. The Western Electric Co. of New York installed the apparatus in use.

### PROPOSED ELECTRIC-LIGHT PLANT AT LOJA.

The municipality of Loja, Republic of Ecuador, has taken steps looking toward the negotiation of a loan of 30,000 sucres ($14,610) for the purpose of installing an electric-light plant.

### HIGHWAY CONSTRUCTION IN EASTERN ECUADOR.

Throughout the eastern section of the Republic of Ecuador there is awakening a great activity along lines of public improvements. The various towns in this section are keenly aware of the fact that a proper development of their vast resources can only come through the construction of new highways, establishment of railway communication with the important points of the country, and, in general, through those means which bring into close touch the seaport towns and commercial centers. Already important steps have been taken by these towns looking toward the opening up of vast stretches of fertile territory and regions rich in mineral wealth.

The City of Loja has petitioned the Federal Government to contract for the construction of a highway, which will connect it with the region drained by the Zamora River, at a cost of about $25,000. This territory on the eastern range of the Cordillera in Ecuador is exceedingly rich in its natural wealth.

In the great central plateau of the country, a commission was recently appointed by the Municipality of Paute to explore the eastern sections, via Palmas, with the object of reopening the national highway to Mendez, on the banks of the Santiago River; while from the exploiting parties which have gone into the section of the country known as the "Oriente," come glowing reports of the possibilities for profitable development of the mines and forests in those regions.

### QUITO TRAMWAY CONSTRUCTION.

The construction of the tramway which will unite the station of the Guayaquil and Quito Railway at Quito with the city proper, is rapidly progressing. Rails have been laid over a considerable section of the line, and the tramway will probably be opened to traffic next August. Arrangements are also being made for the electrification of this road.

### BAHIA DE CARAQUEZ TO QUITO RAILWAY.

The progress which is being made in the developments at the Port of Bahia gives every indication of this point becoming a formidable rival of the other ports in the Republic. The railroad from here to Quito is being pushed forward vigorously, and already there has been opened to traffic a section extending to a point near Calceta, a distance of 55 kilometers. The preliminary survey on the Chone branch, via Caimito, has been completed, as has also the survey on the line from Guayaquil to Balzar. Plans for the installation of an electric light plant are now being prepared, and every effort is being exerted to render the port of Bahia de Caraquez an important commercial center.

## GUATEMALA

### THE BANANA INDUSTRY.

The United States consul general at Guatemala City, GEORGE A. BUCKLIN, Jr., submits an interesting report under date of April 6, covering the conditions and approximate expenses under which bananas can be cultivated in Guatemala. He states that the total cost of planting bananas, including felling, clearing, making roads and drains, etc., should not exceed $20 per acre. The attention required by the plant in this country is relatively small; they require pruning and cleaning away of grass and brush which may grow up. The land, however, has been found so rich that fertilization and extensive cultivation are unnecessary. Mr. BUCKLIN places the number of bunches, per acre, at from 120 to 200.

## HAITI

### BOUNDARY QUESTION REFERRED TO THE HAGUE TRIBUNAL.

According to the French paper "America," the boundary dispute between Haiti and the Dominican Republic has been referred to the International Arbitration Court at The Hague.

### DIPLOMATIC CHANGES.

Mr. EDGARD NUMA, Secretary of the Haitian Legation at Washington, has been transferred to Paris and will be succeeded by Mr. VICTOR DELBEAU.

### RELIEF APPROPRIATION FOR CAYES.

A special appropriation of 200,000 gourdes ($50,000) was made by the Haitian Government for the relief of the sufferers as a result of the recent fire which destroyed the principal section of the City of Cayes.

### WITHDRAWAL OF PAPER MONEY AND DEMONETIZATION OF NICKEL CURRENCY.

In pursuance of the act of the Legislature of October 28, 1910, President SIMON issued on March 29, 1911, a decree providing that paper and nickel money would, after the 30th of that month, be received at the Public Treasury at the rate of 5 gourdes paper or nickel for $1 gold, or 400 per cent; and until the paper and nickel money shall be completely retired, they shall circulate at the same rate throughout the Republic.

### ARRIVAL OF AMERICAN CONCESSIONNAIRES IN HAITI.

"Le Matin" of Port au Prince, in its issue of April 18, announces the arrival of a staff of engineers from New York accompanying Mr. MACDONALD who holds two important concessions, viz, for the construction of a railroad which is to cross the entire island, and for the exploitation of the banana industry. These engineers, who represent a syndicate of influential capitalists, will make a report on the most expedient methods of developing these two enterprises, and immediately after the submission of their report, work will be begun and rapidly pushed forward.

### NEW ELECTRIC LINE AND POWER COMPANY.

On April 17, President SIMON signed two important bills which will do much toward furthering the industrial development of the Republic of Haiti. One of the bills authorizes the operation of the Haitian stock company organized at Port au Prince, by public act of March 16, 1911, under the name of Petionville Electric Railroad Co., for the purpose of constructing and operating an electric line from Port au Prince to Petionville.

The other bill, signed on the same date, authorizes the formation of a stock company under the name of Haitian Power Co. This company, by the establishment of main plants for the generation of motive power, will furnish the necessary power for the various industries under the most favorable conditions.

# HONDURAS

### PRESIDENT BERTRAND'S CABINET.

The Provisional President of the Republic of Honduras, Dr. Francisco Bertrand, has organized his cabinet in the following manner:

Minister of Justice, Sr. Alberto Membrano.
Minister of War, Sr. Rafael López Gutierrez.
Minister of the Interior, Sr. José María Ochoa Velázquez.
Minister of Foreign Relations, Sr. Faustino Davila.
Minister of Finance, Sr. Santos Soto.

### TRADE OPENING FOR GASOLINE STOVES.

According to a foreign trade journal, the Republic of Honduras offers a profitable market for gasoline stoves. Catalogues and correspondence should, of course, be in the Spanish language. Owing to the damp climate these stoves should, as far as possible, be manufactured from metal not subject to oxidation.

# MEXICO

### MESSAGE OF PRESIDENT DIAZ.

At the opening of the present session of the Mexican Congress on April 1 last, President Diaz read his message, in compliance with the constitutional provision, dealing with the public administration during the period comprised between September 16, 1910, and March 31, 1911.

The message opens by stating that relations with foreign nations continue to be as friendly and cordial as ever, and enumerates several recently ratified international agreements, viz:

Convention with Italy regulating the status of Mexicans and Italians married by diplomatic or consular agents, signed December 6, 1910.

Convention for the promotion of commercial relations between Mexico and Denmark, promulgated on November 18, 1910.

Two conventions and a protocol, for the unification of the rules governing the right of search, seizure, and salvage on the high seas, respectively, signed at the International Conference of Maritime Law, held at Brussels September, 1910.

A protocol to the convention for the establishment of an International Prize Court, signed at The Hague, October 18, 1907, which Mexico confirmed on December 22, 1910.

Convention with the United States for the settlement of the Chamizal question, the ratifications of which were exchanged on January 24, 1911.

A consular convention with Turkey, signed December 23, 1910.

Conventions and resolutions passed by the Fourth International Conference of American States, held at Buenos Aires July 12 to August 30, 1910.

A review of the Department of the Interior then follows, and here the President comments on the excellent sanitary conditions prevailing throughout the Mexican States at the present time, and expresses his satisfaction at the remarkable improvement made in this respect over the preceding year.

Next is given the total value of the transactions registered through the offices of the Department of Justice in the Federal District during the second half of 1910. This sum is placed at 207,000,000 pesos.

Under the head of the Department of Public Instruction mention of the following activities is made: The reorganization of the Superior Board of Education to meet the new conditions imposed by the establishment of the National University; the assembling of a National Primary Education Congress at Mexico City last September; the continued activity in the construction and remodeling of schoolhouses; the entrance of the Primary Normal Institute into its new building. The inaugural exercises of the National University, at which were present delegates from 22 foreign educational institutions, and the results of recent archæological and ethnological explorations are also touched upon in this résumé.

On the Department of Promotion, President Diaz dwells at some length at the accomplishments of this progressive branch of the Federal administration. During the second half of 1910 there were issued 126 title deeds to lands of the public domain, while many other parcels of land were leased; the proceeds of these transactions to the Federal exchequer amounted to 180,000 pesos. Extreme satisfaction is expressed in the message at the splendid showing made by Mexican exhibitors at the International Fair held at San Antonio, Tex., where they received 90 awards, as follows: Forty-three gold medals, 28 silver medals, 9 bronze medals, and 10 special prizes to those in charge of the Mexican exhibit. Mining development continues normal, and during the second half of 1910, 863 titles covering 12,811 claims were issued. Agricultural development is on the increase—a grade of corn superior to that produced last year made possible a decrease in the price of grain; the National College of Agriculture and Veterinary is in a flourishing condition with a total enrollment of over 600 students; a general colonization agency was established in Europe for the purpose of diverting immigration to Mexico. Over 2,000 agents to disseminate information and literature concerning farming have been appointed, and the first live-stock census of Mexico in now in preparation. The advance figures of the general census of the Republic taken last October reveals a total population slightly in excess of

15,000,000, which represents an increase over the last decade of about 1,500,000 inhabitants. During the last six months of 1910, 645 patents were granted; 507 trade-marks registered; and 709 copies of registered trade-marks were received from the International Office of Berne, together with 102 copies of assignments.

The Department of Communications and Public Works is next reviewed. In Coatzacoalcos and Salina Cruz preliminary work has been completed under the contracts for the development of the ports. Three new lighthouses and two buoys have been provided for Veracruz and the coast of Yucatan. A new embankment on the Rio Grande over a half kilometer in length has been built and the old embankment opposite Matamoras has been repaired. The total extent of the railways under Federal control at the present time is 19,806 kilometers, which, together with the 4,840 kilometers of railroad under the jurisdiction of the State Governments, make a total of 24,646 kilometers for all the lines of the Republic.

The postal report shows that 11 new local post offices and two agencies were established during the period under review, making the total number of post offices of all classes 2,856; 99,000,000 pieces of mail matter were handled during the latter half of 1910, an increase of 5,000,000 pieces over the corresponding period last year. The domestic postal money orders issued during the half year amounted to 28,700,000 pesos, which is an increase of over 3,000,000 pesos as compared with the same period of 1909. The international money orders issued at Mexico aggregated 2,800,000 pesos, while those cashed in the country amounted to 4,300,000 pesos. The general receipts of the postal service were 2,500,000 pesos as compared with 2,200,000 in the corresponding period of 1909.

The postal money-order service was extended to Italian Somaliland, and to French Indo-China and the Indo-Chinese offices in general. In December last a convention was drawn up for the establishment of a postal money-order service between Mexico and the British colony of the Bahamas.

Referring to the Federal telegraph lines, it is reported that in the half year from July 1 to December 31, 1910, new wires aggregating 2,120 kilometers in length were laid on the Federal system, and old wires with a total length of 1,000 kilometers were replaced by new ones. The volume of telegraphic correspondence continues to increase, and the receipts from messages transmitted for the public during the last six months of 1910 exceeded those of the same period of 1909 by more than 6 per cent.

Concerning the Department of Finance and Public Credit, President Diaz says that both the customs revenues and the receipts from the stamp taxes displayed an upward tendency. In fact, up to the close of December last, the receipts from customs taxes showed an increase

of 2,500,000 pesos. As to the stamp tax, its yield for the second half of 1910 amounted in round numbers to 17,200,000 pesos, or an increase of 1,000,000 pesos.

The negotiations incident to the conversion of the 5-per-cent loan of 1899, into a new loan at 4 per cent, were continued during the period under review. Toward the close of 1910 the Government had succeeded in redeeming more than half of this loan through the receipts of the new 4-per-cent issue.

The message closes with expressions of hope on the part of President Diaz that Congress would enact the various laws which he has recommended from time to time, among which are included the modification of the suffrage laws; suppression of abuses by local authorities; distribution of lands among small farmers, and independence of the judiciary.

## NEW CABINET.

The Cabinet of President Diaz, of Mexico, as recently reorganized by him, is constituted as follows:

Minister of Foreign Relations, Sr. Francisco Leon de la Barra;

Minister of the Interior, vacant;

Minister of Justice, Sr. Demetrio Sodi;

Minister of Public Instruction and Fine Arts, Sr. Jorge Vera Estañol;

Minister of Promotion, Sr. Manuel Marroquin Rivera;

Minister of Communications and Public Works, Sr. Norberto Dominguez;

Minister of Finance and Public Credit, Sr. José Yves Limantour;

Minister of War and Marine, General Manuel Gonzales Cosio.

## FOREIGN COMMERCE, SECOND HALF OF 1910.

According to statistics published by the Department of Finance, the foreign commerce of Mexico during the second half of 1910 amounted to 245,801,835.95 pesos Mexican currency, imports, 105,950,227.21 pesos, and exports, 139,851,608.74 pesos. A comparison of these figures with those for the corresponding period of 1909 shows an increase of 19,278,306.25 pesos in imports, and of 17,591,479.03 pesos in exports, 22.24 and 14.39 per cent, respectively.

## WATERPROOF CLOTH FACTORY.

Messrs. Hiller and Nickler have entered into a contract with the Government of Mexico for the establishment and operation of a plant for the manufacture of waterproof cloth for uniforms, tents, etc., in which plant they are to invest a capital of 200,000 pesos Mexican currency. The concessionaires may also establish other plants at different points in the Republic, provided that a capital of no less than 50,000 pesos be invested in each additional plant.

# NICARAGUA

## NEW CUSTOMS RULES.

Under date of March 8, 1911, a decree was issued amending several customs rules. Among other changes it provides that in the registry of merchandise for the apportionment of tare to goods of different appraised value, the customhouses shall apply the packing to articles predominating in quantity. If the various articles contained in a package be of equal quantity, the tare shall be apportioned equally among them. The decree further provides that, until the Nicaraguan tariff has undergone a general revision, there shall be a rebate of 50 per cent on the appraisement of pure grape wines bottled and of 40 per cent in casks.

## LIGHTHOUSE AT CAPE GRACIAS.

The Central-American Commercial Company has entered into a contract with the Minister of Promotion of the Republic of Nicaragua for the construction of a lighthouse at Cape Gracias a Dios. The Government has deeded a large tract of land to the company who will erect the lighthouse at its own expense, in compensation for which it is granted the right to collect a tax from all vessels entering the bay.

## PREMIUMS FOR THE IMPORTATION OF PEDIGREE STOCK.

For the purpose of encouraging the improvement of native horses, sheep, cattle, and other domestic animals through the introduction of the best foreign stock, and in order to develop the agricultural and industrial enterprises of the country, a special decree, appearing in the "Gaceta Oficial" of Managua, for March 2, 1911, has been issued. This grants a premium on each head of live stock introduced for breeding purposes equal to the sum paid by the importer for freight from the port of origin to that of destination. If the stock imported comes from a point other than that of embarkation, the premium shall be increased so as to cover the freight charges from the former place. This premium is in addition to the free entry of live stock into the Republic.

The same decree also provides for a premium to any person cultivating foreign products superior in quality to native varieties. The seeds imported for this purpose shall be admitted free of duty.

# PANAMA

## BUDGET FOR THE YEARS 1911 AND 1912.

By decree dated February 14 last, the President of the Republic of Panama estimates that the total revenues for the years 1911 and 1912 will amount to $7,200,000, and fixes the fiscal expenditures during the same period at the same amount, distributed as follows among the various departments:

| | |
|---|---|
| Department of the Interior and Justice | $2,205,451.00 |
| Department of Foreign Relations | 466,920.00 |
| Department of Finance and Treasury | 834,461.10 |
| Department of Public Instruction | 1,343,306.00 |
| Department of Promotion | 2,349,861.90 |
| Total | 7,200,000.00 |

## AGRICULTURAL COMPANY.

Advices received from Panama state that several capitalists of Colon have recently organized an agricultural company under the name of "Ingenio de Las Minas," with a capital of $350,000. The principal business of the company will be the cultivation of sugar cane on a large scale, as well as rubber, bananas, and other tropical products. The company has acquired the ownership of a parcel of land measuring several thousand square acres, situated near Colon and easily accessible by land and sea.

# PARAGUAY

## USE OF COAL IN PARAGUAY.

An illuminating report from CORNELIUS FERRIS, Jr., the United States Consul at Asuncion, Paraguay, states that the time can not be far distant when the Paraguayan city of Asuncion will become a distributing point for coal. Railroad officials are already planning for the substitution of that fuel for wood on account of the connection of Paraguay's one railroad with the Argentine lines to Buenos Aires. Such connection will not only create a demand for coal as a motive power to handle through traffic from Buenos Aires to Asuncion, but it will also facilitate the depositing of coal at Asuncion for distribution. The prospective entrance of southern Brazilian railway systems into Paraguay will also create a demand for, as well as facilitate the establishment of, a coal depot at Asuncion.

The requirements of more than a thousand steam vessels a year entering this port and the operation of electric-light, power, and tramway plants under franchises recently granted will also offer increasing openings for the sale of coal. Heretofore wood has been the fuel used on the country's one short line of railroad; coal is used on vessels from the River Plata, while wood and coal both are used on boats running farther north into the interior; but in the nature of things the use of wood for fuel must steadily decrease. The supply is not only diminishing, but it is irregular, subject to interruption, and increasing in cost. What little coal is used here now is Welsh coal, costing about $25 American currency per 1,000 kilograms (2,204 pounds). From calculations of local railroad officials it is found that at the present cost of wood and with the existing facilities for bringing in coal, the generating power of coal costs three times as much as that of wood, but the tendency of conditions is to increase the cost of wood and make its supply more and more unreliable and to decrease the cost of coal.

An American concern has recently entered upon the exploitation of quebracho timber, which it will send from Paraguay to the United States in its own ships. Such vessels could be utilized for carrying American coal on the southbound trip. This suggestion is made as an instance of the tendency of events which are gradually opening up the interior of South America to foreign commerce and by which coal dealers in the United States may profit.

# PERU

### DELEGATE TO CORONATION CEREMONIES.

The Government of Peru has appointed Señor Don Felipe Pardo, Minister of Peru in Washington, to represent the Peruvian Government at the coronation ceremonies of the King of England.

### FREE ENTRANCE OF PERSONAL EFFECTS.

The full text of the presidential decree, issued on February 10, 1911, providing for free entrance into the Republic of personal effects of travelers appears in "El Diario" of Lima, for February 19, 1911.

### PARTICIPATION IN FIRST UNIVERSAL RACES CONGRESS.

The Government of Peru will participate in the First Universal Congress of Races, the opening session of which is to be held in the University of London on July 26, 1911. The Executive Committee of this Congress has appointed Dr. Joaquin Capelo, of Lima, repre-

sentative of Peru at this international gathering. The object of the Congress is to discuss from a practical standpoint the general relations of the peoples of the Eastern and Western Hemispheres, their growth and development, the strengthening and enlargement of the amicable sentiments existing between them, and the cordial cooperation and unity of action in matters relating to their general welfare jointly and individually, and to their material, educational, moral, and scientific development.

### PRODUCTION OF THE NATIONAL SALT CO.

The statement of the National Salt Co. for the second half of 1910 shows that this company, which holds the exclusive right to exploit the salt industry of Peru, sold during the period in question, 8,923,336 kilograms of salt. At the present time the National Salt Co. operates more than 100 deposits in the different Departments and Provinces of Peru. The total output from these during the last six months of 1910 was valued at £53,908 as compared with £43,178 for the same period of 1909.

The value of the salt production of the National Salt Co. of Peru from 1903 to 1910, inclusive, is shown in the following table:

| | |
|---|---|
| 1903 | £38,044 |
| 1904 | 53,462 |
| 1905 | 61,294 |
| 1906 | 64,726 |
| 1907 | 81,223 |
| 1908 | 85,694 |
| 1909 | 87,294 |
| 1910 | 93,238 |

### PROPOSED RAILWAY FROM ICA TO EL MOLINO.

The Department of Fomento (Promotion) of Peru has authorized a survey of a railway to run from the city of Ica, in the Department of the same name, to the village of El Molino.

## SALVADOR

### A NEW HONOR FOR THE MINISTER OF SALVADOR.

With the return of Señor Don Federico Mejía, the Minister of Salvador to the United States, from a brief visit to his country, came the pleasing announcement that the Government of Salvador had designated Señor Mejía as its representative to the Conference of the International Union for the Protection of Industrial Property, opened in the city of Washington on May 15, 1911.

### RECOGNITION OF EX-PRESIDENT FIGUEROA'S SERVICES.

The National Legislative Assembly of Salvador, in recognition of the valuable services rendered by Gen. FERNANDO FIGUEROA during his incumbency as President of the Republic, has, by special act, pronounced him to be well deserving of praise by the nation, and tendered him a vote of thanks for the wise and zealous manner in which he guarded the interests of the country.

### NEW CENSUS OF THE REPUBLIC.

The President of Salvador has decreed that a new census of the Republic be taken on July 1, 1911, in accordance with instructions which will emanate from the General Bureau of Statistics. It is proposed to make this census as accurate and complete as possible, and to that end the departmental and municipal governments have been instructed to lend their cooperation.

### CHANGES IN THE CUSTOMS TARIFF.

#### IMPORT DUTIES.

The National Legislative Assembly of Salvador, on April 4, 1911, made important changes in customs duties on both imports and exports. The law was signed and approved by President ARAUJO on April 5, 1911, and is published in the Diario Oficial of April 6, 1911.

By the terms of the new law, which, except as to the coffee export tax, went into effect on the day of its publication, there is an increase of 20 per cent United States gold, in the import duties on the basis of the aforo on all merchandise entered in the ports of the Republic, with the exception of flour and the articles hereinafter enumerated.

Under No. 6 of the tariff the aforo on coarse cotton cloths, such as unbleached cotton and cotton drill, is reduced from 20 to 10 centavos per kilo.

Under No. 9 of the tariff the aforo on the cotton goods therein enumerated, which includes most of the ordinary cotton cloths up to 20 strands in warp or woof to 7 millimeters (one-fourth inch), is reduced from 40 centavos to 25 centavos per kilo.

Under No. 10 of the tariff the aforo on the cotton goods therein enumerated, which includes cotton ribbons, elastic for shoes, etc., is reduced from 50 centavos to 35 centavos per kilo.

Under No. 11 of the tariff the aforo on cotton goods therein enumerated, which includes goods such as cambrics, tarletans, calicoes, cretons, muslins, bleached cotton, unbleached dyed cotton, cotton flannel, and cotton material for bookbinding, is reduced from 60 to 45 centavos per kilo.

Under No. 80 of the tariff the aforo on skins of buck, sheep, calf, pig, genuine or imitation, chamois, and morocco is reduced from 30 to 20 centavos per kilo.

Sulphate of quinine, which, under No. 98, has an aforo of 40 centavos per kilo, is made free of all duties and imports.

All of the above, stated articles are exonerated from the payment of the 20 per cent gold surtax above mentioned.

EXPORT DUTIES.

An additional export duty of 1 peso, silver, per quintal (101.4 pounds) is placed upon the following articles: Rice, balsam, hides, deer skins, alligator skins, and skins of all kinds, and rubber; of 2 pesos, silver, per quintal, on leaf tobacco; of 30 cents United States gold on coffee cleaned or in parchment; and of 50 cents United States gold on sugar.

The additional impost on coffee is not to be enforced until November 1, 1911.

For the understanding of the above tariff changes in import duties, it is necessary to understand that by the Salvadorian system of computing tariffs the aforo represents neither the duty nor the appraisement proper, but is a statutory appraisement of so much per kilo gross weight, used as a basis for computing the duties. These duties are of two kinds, gold duties and silver duties, both applied to the same aforo. The gold duties are 37 per cent of appraisement, and "additional imposts" of $6 per hundred kilos, to which must be added the new duty, with exceptions as above, of 20 per cent gold of appraisement. The silver duties are 77 per cent of appraisement, clearance fees and liquidation of policy, 5 pesos, and 25 centavos, respectfully, per hundred kilos, and a stamp tax of 1 per cent on appraisement.

By another law, published in the "Diario Oficial" of Salvador of April 5, 1911, the aforo on raw materials for the manufacture of soap and candles is reduced from 5 centavos per kilo to 4 centavos per kilo. The aforo on these articles was until August 16, 1907, 3 centavos, but on this date an addition of 2 centavos to the aforo was made. The rebate covers crude stearine, oleine, coconut oil, palm oil, paraffin, rosin, pitch and tar, caustic soda and potash, soda ash, silicate of soda, refined tallow, and candlewicks.

In addition to the above reduction in the aforo, the "additional" impost is reduced to 1 centavo per kilo on the articles mentioned above for use in the manufacture of candles. None of these articles are subject to the 20 per cent gold surtax imposed by the preceding law.

## TELEGRAPHS AND TELEPHONES IN 1910.

According to official statistics just published, there are in the Republic of Salvador 148 telegraph and telephone offices. The total number of telegrams transmitted during 1910 was 1,540,440, of which 968,287 were private and 571,753 official. The amount paid on the former was 165,407.12 pesos and on the latter 282,978.62 pesos, or a total revenue of 448,385.74 pesos.

### NEW BRIDGE.

The National Assembly of Salvador has provided for the construction of a bridge on the national highway from the city of Chinameca to Jucuapa. The work of construction is to be undertaken at once.

## UNITED STATES

### LELAND STANFORD UNIVERSITY TO HEAR SENHOR LIMA.

Senhor MANOEL DE OLIVEIRA LIMA, Brazilian Minister to Brussels, and one of the most distinguished diplomats and writers in the public service of Brazil, has accepted the invitation of the Leland Stanford University of San Francisco, California, to deliver a course of lectures on Brazilian history. Other universities have extended similar invitations to Senhor LIMA, and it is hoped that he will be able to remain in this country long enough to deliver his delightful lectures at some of the other institutions of this country. The course of lectures on Brazilian history which Senhor LIMA delivered before the Sorbonne of Paris was largely attended and attracted considerable attention in the literary world of Paris. Minister LIMA is well known at Washington, where he served for several years as First Secretary of the Brazilian Embassy. He also published his book on the United States while here.

## URUGUAY

### PURCHASE OF NORTH AMERICAN PAINTINGS BY URUGUAYAN GOVERNMENT.

The Government of Uruguay has purchased three of the paintings recently exhibited at the United States Exposition of Paintings and Bronzes at Montevedio. The principal one of these paintings is the full-sized canvas entitled, "The Spirit of Ancient Art," by PHILLIP L. HALE, of Boston, Massachusetts. During the art exhibit this picture attracted a great deal of attention and was adjudged to be among the most striking works in the exhibition. The other two paintings are also of great merit but smaller in size. One is by WALTER ELMER SCHOFIELD, of Philadelphia, Pennsylvania, and represents "The First Days of Spring." This picture received the gold medal and first award at the International Exhibition at Buenos Aires in May, 1910. The other painting depicts "River Nocturne," by GEORGE A. THOMPSON, of New Haven, Connecticut. Mr. CARLOS M. HERRERA, a talented Uruguayan painter and artist who is President of the Circle of Fine Arts, selected these pictures at the request of the President of the Republic.

### EMPLOYMENT OF FOREIGN MEAT EXPERTS.

The Department of Industries has authorized Doctor SALMON, the Director of the Veterinary School of Uruguay, to engage the services of several experts in the meat industry from the United States and Germany for work in the Republic. Foreign agricultural experts are also to be engaged for service in the agricultural school soon to be established in the interior of the Republic.

### RECLASSIFICATION OF MEDICINAL PREPARATIONS.

A recent decree of the Department of Finance of Uruguay reclassifies such preparations as aperitive wines and bitters, imposing an import duty based on the major scale of ordinary wines, or a specific duty of 31 cents a bottle. These preparations were formerly classified under the minor scale of medicinal wines. The new schedule becomes operative on and after May 1, 1911.

### URUGUAY AT INTERNATIONAL CONGRESSES.

In 1910 the Government of Uruguay participated in the following international conferences and congresses: Fourth Pan American Conference; International American Congress of Medicine and Hygiene; South American Railway Congress; International Congress of Americanist, and the South American International Scientific Congress, all of which were held in Buenos Aires; International Congress of Gold, Vienna; International Congress of Esperanto, Washington; International Conference for the Unification of the Methods for the Analysis of Foodstuffs, Paris; International Congress of Professional Infirmities, Brussels; International Congress of Radio-Telegraphy and Electricity, Brussels; International Congress of Railways, Berne; First International Congress of Agricultural Societies and of Rural Demography, Brussels; International Congress of Alimentary Hygiene and Rational Alimentation of Man, Brussels; International and Universal Exposition of Brussels; International Juridical Congress of Joint Stock and Cooperative Societies, Brussels; International Congress for Higher Technical Teaching, Brussels; Fifth International Congress of Gynecology, St. Petersburg; and the Congress for the Creation of an International Union of Bibliography and Documentation, Brussels.

In 1911 Uruguayan delegates will be sent to the following international gatherings: International Artistic and Historical Archeological Exhibition, Rome; International Exhibition of Industry and Labor, Turin; International Exhibition of the North of France, Roubaix, and to the International Exhibition of Hygiene, Dresden.

### A NEW URUGUAYAN NAVIGATION COMPANY.

The Minister of Industries of the Government of Uruguay has been presented with a project for establishing a Uruguayan navigation company for freight and passenger traffic, between Montevideo and Buenos Aires and the river and coast ports of the Republic. The promoters propose to raise $2,000,000 for this line, and to use in the service the most modern type of passenger and freight vessels.

### REDUCTION IN CABLE RATES.

The Government of Uruguay has ordered a reduction in the cable rates of the Western Cable Co. to less than 60 cents per word to any point in Europe or the United States. In the future, the tariff schedules of the cable companies will be revised annually.

### SECTION OF MIDLAND RAILWAY OPENED.

A decree has been issued by the Government of Uruguay authorizing the provisional opening to public service of a section of 53 kilometers of the Midland Railway branch from Algorta to Fray Bentos, now in course of construction. The new section completed is between kilometers 34 and 87.

## VENEZUELA

### INTERNATIONAL CONGRESS OF STUDENTS.

The Second International Congress of Students will be held at Caracas July 4–24, 1911. It will be attended by student delegates from the Universities of Colombia, Ecuador, and Venezuela, which countries formerly constituted the great Republic of Colombia, dissolved in 1830. Among the subjects to be discussed at the conference under the general head of student welfare are: Solidarity and representation of students; betterment of their condition; regulation of universities; pedagogy; and cooperation among students toward the advancement of public instruction. Papers and discussions on questions of political science, philosophy, literature, medicine, architecture, etc., will form the second part of the program under the head of educational development.

### RAILROAD OPERATIONS IN 1910.

According to data published by the Director-General of Statistics of the Republic of Venezuela, the movement of the railroads in the country during the year 1910 is set forth in the table given below:

| Railroads. | Fares. | | Merchandise transported. | Total receipts. | Total expenditures. |
|---|---|---|---|---|---|
| | Number. | Receipts. | | | |
| | | *Bolivars.* | *Kilograms.* | *Bolivars.* | *Bolivars.* |
| Ferrocarril de La Guaira á Caracas | 67,668 | 423,861.99 | 55,670,806 | 1,874,363.74 | 926,753.48 |
| Gran Ferrocarril de Venezuela | 139,225 | 749,410.34 | 33,528,230 | 2,168,700.00 | 1,388,455.32 |
| Ferrocarril Central | 160,742 | 128,582.50 | 17,159,128 | 382,714.25 | 260,571.45 |
| Ferrocarril de Maiquería á Macuto | 74,870 | 52,951.00 | ..... | 66,260.50 | 70,154.90 |
| Ferrocarril de Puerto Cabello á Valencia | 21,129 | 129,873.11 | 27,354,930 | 852,718.30 | 591,619.41 |
| Ferrocarril de Carenero | 18,101 | 37,686.50 | 9,937,497 | 284,883.65 | 298,816.70 |
| Ferrocarril de Coro á La Vela | 2,237 | 3,644.00 | 2,033,360 | 22,417.28 | 20,688.86 |
| Ferrocarril Bolívar | 10,182 | 63,208.35 | 22,855,942 | 1,734,735.35 | 1,229,021.65 |
| Ferrocarril de Guanta | 3,869 | 10,993.00 | 2,597,408 | 86,532.39 | 86,532.39 |
| Ferrocarril de La Ceiba | 3,908 | 26,376.50 | 17,599,678 | 864,629.20 | 535,020.88 |
| Ferrocarril del Táchira | 4,142 | 26,900.75 | 12,537,889 | 901,408.66 | 599,057.67 |
| Total | 506,073 | 1,653,488.04 | 201,274,868 | 9,239,363.32 | 6,006,692.71 |

## TARIFF NOTES.

By decree of President Gomez of April 1, 1911, manufactured rubber in the form of tires for carriage wheels must be manifested as rubber for tires (caucho para llantas), and will be dutiable under Class IV of the tariff. The rate of duty of Class IV is 75 centimes of the bolivar per kilogram, about 6.7 cents United States, per pound. The new tariff, issued on April 10, 1911, incorporates the above decree and includes, in addition, tires for farm cart wheels.

By another decree, of April 4, 1911, gasoline and benzine are placed in Class I of the tariff. The rate of duty of Class I is 5 centimes of the bolivar per kilogram, about $0.45 United States, per pound. In the new tariff the substance of this decree is included.

By another decree, of April 5, 1911, all kinds of meat and fish, except sardines, must be manifested under the general name of preserved foods (conservas alimenticias), specifying particularly whether of meat (de carne) or of fish (de pescado), in order to distinguish them clearly from canned vegetables not specified, and will be placed in Class III of the tariff. The rate of duty in Class III is 25 centimes of the bolivar per kilogram, nearly 2.3 cents United States, per pound. The substance of this decree is also included in the new tariff.

## IMPORTANT CHANGES IN THE CUSTOMS TARIFF.

Important changes in the tariff law of Venezuela have been effectuated by the decree of President Gomez, dated April 10, 1911, and published in the "Gaceta Oficial" of that date. The decree is issued in pursuance of the authority conferred by Law VI of the Treasury Code and is in the nature of a very complete revision of the whole tariff law. There are no changes in the classification. In the revision, as in the old law, there are nine classes, with duties beginning for the lowest class at 5 centimos, and increasing for each class up to the ninth to 20 bolivars per kilo. The revision incorporates all decrees and modifications affecting the tariff since January, 1908, the date of the old tariff, and in addition makes many important changes in classification, extensions, and other important modifications.

INTERNATIONAL UNION OF AMERICAN REPUBLICS

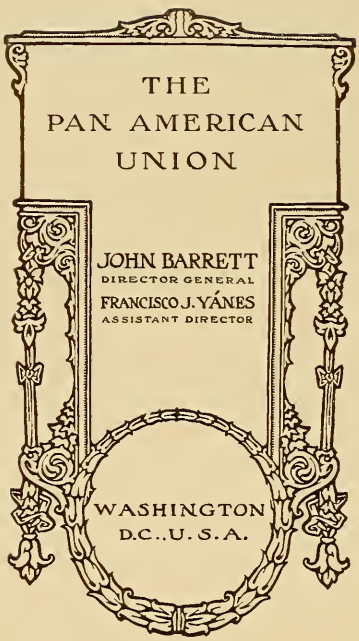
# BULLETIN

OF THE

# PAN AMERICAN UNION

JUNE 1911

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SEÑOR DR. FRANCISCO BERTRAND,

Provisional President of the Republic of Honduras.

BULLETIN
OF THE PAN AMERICAN UNION

VOL. XXXII. JUNE, 1911. NO. 6.

DURING the last month there has come from the press the book of the Director General entitled, "The Pan American Union—Peace, Friendship, Commerce." It is dedicated to Mr. ANDREW CARNEGIE in the following words:

The Director General of the Pan American Union dedicates this little book to Mr. ANDREW CARNEGIE, whose sincere interest in the cause of the worldwide peace and in the upbuilding of lasting friendship among the American nations inspired him to that generosity which has made possible the new home of the Pan American Union—a beautiful temple of international peace and good will, and a practical office for the extension of trade among the American nations. Its chaste marble walls, its significant ornamentation, its open patio, in which grows vigorously the "peace tree" planted by the hands of President TAFT and himself, its spacious and dignified assembly hall, adapted to international conferences, its broad corridors, carrying the flags and escutcheons of the American nations, and its many busy offices, all emphasize the nobility and usefulness of his gift and make the structure a fitting monument alike to his own efforts for the abolition of war among all nations and to the importance of the growing movement for Pan American comity and commerce.

Possibly the best description, in brief terms, of the character and purpose of the book can be obtained by quoting the introduction:

The Pan American Union (the new name given the International Bureau of the American Republics by the Pan American Conference held at Buenos Aires in July and August, 1910) is a voluntary organization of the 21 American Republics, including the United States, maintained by their annual contributions, controlled by a Governing Board composed of the diplomatic representatives in Washington of the other 20 Governments and the Secretary of State of the United States, who is chairman ex officio, and devoted to the development and conservation of peace, friendship, and commerce between them all. To explain in reasonable and informative detail the scope, purpose, history, work, and achievement of this organization, and in that way to aid the cause of peace, good understanding, and exchange of commerce among nations, this little book has been planned, prepared, and published.

In the first chapter, "Pan America To-day," it describes in brief terms a considerable portion of its field of effort—Latin America, a wonderland of progress, resources, and opportunity.



Photograph by Harris-Ewing.

DR. DOMICIO DA GAMA,

The new Ambassador of Brazil to the United States.

The second chapter, "The Pan American Union," elaborates upon the statement contained in the opening sentence of this introduction and gives interesting facts which will surprise many persons.

The third, "The Pan American Building," tells the story of the beautiful and practical edifice which is the permanent home of the Union.

The fourth, "Pan America and Peace," reviews the remarkable honor record of the American nations in behalf of peace and its persuasive hand-maiden arbitration.

The fifth, "Pan American Speeches," is a collection of historical and notable utterances by distinguished statesmen upon Pan American solidarity of interest and unity of purpose.

The Appendix contains the names of the Governing Board, new statistics of Pan American trade, Mr. CARNEGIE'S celebrated speech "War as the Mother of Valor and Civilization," and a long and gratifying list of differences between the American nations which have been settled by arbitration. If this book awakens further interest in the Pan American movement or in Latin America as a field of study, travel, or trade, additional information can be obtained by addressing the Director General, Pan American Union, Washington, D. C.

From reviews which have appeared in different papers, a few are quoted below.

The New York Times in its issue of May 28 says:

The success which has attended the efforts of the Pan American Union, formerly the International Bureau of American Republics, is a proof of what human determination and energy can achieve, even though working against obstacles that are fundamental in human nature. Between the United States and the other Republics of the Western Hemisphere there was about as little sympathy and mutual comprehension and appreciation upon which to build the contemplated structure as there could well be between nations. Their very geographical relationship was a detriment, because the movements of mankind and its freest developments proceed on lines of latitude rather than of longitude. Race repugnances had to be overcome and also the effects of generations of mutual misunderstanding and reciprocal suspicion and disdain. What has been accomplished by the determined effort of leading men in the Republics of North and South America to do away with these old, unfraternal relations and establish new ones of friendship and close social and commercial intercourse makes an interesting story. Mr. JOHN BARRETT, since 1907 Director General of the Union, tells that story in a handsome volume entitled "The Pan American Union," published by the Union itself. (Washington, D. C.) One chapter, "Pan America To-day," gives a bird's-eye view of the territory covered by the 21 Republics that compose the organization. Another section tells in detail the history of the Union and recounts its chief achievements. These pages are particularly full of interest and will surprise nearly all readers who have not kept in intimate touch with the work that has been going on. From the dozen or more pages devoted to the account of its activities and successes it is possible to cull only the facts that last year it distributed 600,000 printed publications in response to specific requests, that it was directly responsible for an increase of $50,000,000 in the trade between American countries, and that the requests for its BULLETIN far outnumber the monthly issue of 5,000 copies, which is all it can print. There is a review of the record the American nations have made in behalf of peace and arbitration, with lists of treaties to which they have been parties running back more than a century. Another section contains a collection of Pan American speeches by notable men. The book is embellished with plates from photographs of people and South American views and incidents in the history of the Union; while the very full description of the beautiful home of the Union in Washington—the gift of Mr. ANDREW CARNEGIE, to whom the book is dedicated—is excellently illustrated.



Photograph by Harris-Ewing.

SEÑOR DON MANUEL DE ZAMACONA É INCLÁN,

The retiring Ambassador of Mexico to the United States.

The Brooklyn Standard Union in its issue of June 3, says:

Director General JOHN BARRETT, of the Pan American Union, publishes an exhaustive and highly artistic memoir of this youthful, energetic, and effective worker in the cause of universal peace. The book of 250 pages is divided into five chapters, each discussing thoroughly a division of the subject, and taken together presenting a complete and exhaustive exposition of the results already attained; of the current forces and activities of the Union and of its scope and purposes for the future, to which are added selections from writings and speeches of many of the notable friends of the Union and of universal peace, among whom Presidents ROOSEVELT and TAFT, Secretaries BLAINE and KNOX are easily foremost. ANDREW CARNEGIE is, by virtue of his million dollar gift to the Union in the form of its splendid building in Washington, appropriately presented as the patron saint and central figure of the movement for universal peace, to which the resources and activities of the Union are so effectively devoted. Liberal space is allotted to the description and illustration of the new building of the Union, its gallery of patriots, its Hall of the Americas, its bas-reliefs and patio, in which President TAFT'S "peace tree" thrives; its statues, panels, paintings, and other artistic accessories.

The current work of the Pan American Union is briefly set forth, indicating remarkable growth; the distribution of publications and correspondence during the last five years having increased over tenfold, and its existence, which a few years ago was but little more than nominal, having become a practical and recognized necessity among the public officials of all departments and the representatives of all governments at Washington. The Union credits itself with $50,000,000 of new American trade last year, and the expansion and strengthening of its efficiency is one of the most remarkable and creditable incidents in the history of public office. Director General BARRETT'S work is timely and valuable, setting forth clearly and in direct and adequate terms the work which has been advanced to high efficiency and promise, and is furthermore notable as an example of the best mechanical skill in bookmaking. Its illustrations, many of difficult subjects, have rarely, if ever, been excelled in detail and delicacy.

The Buffalo News, in its issue of June 4, says:

Director General JOHN BARRETT, of the Pan American Union, formerly the International Bureau of American Republics, has prepared and published a beautifully illustrated and highly interesting and instructive book on the South American Republics, giving a wealth of information about their resources, government, and industries in an attractive form. The title of the work is "The Pan American Union—Peace, Friendship, Commerce."

Director BARRETT has put the effort of an author in his work. It is written in pungent, classic style, and represents his several years' work in organizing this bureau on a high plane. The book contains such information and data as will tell in brief what most persons may want to know about the progress, resources, population, area, and commerce of the 20 Latin American Republics.

Mr. BARRETT also strikingly tells what the American Republics have actually done for peace and friendship. These 20 nations comprising the Union have 70,000,000 inhabitants, and the Union is devoting its efforts to the development of peace, friendship, and commerce among them all.

The Philadelphia Public Ledger, in its issue of May 18, says:

The Pan American Union, through Director General JOHN BARRETT, has issued a sumptuous volume descriptive of its activities in behalf of international comity and mutually advantageous trade relations between the United States and the sisterhood of the Latin American Republics. In its beautiful new home at Washington, given by Mr. CARNEGIE, and planned by Philadelphians, this admirable institution is doing

a remarkable work in its zealous promotion of the best interests of the 21 republics of the Western Hemisphere, and this record of the diligent labors of the Pan American Union is in every way commensurate with the importance of the subject.

The Washington Herald, in its issue of May 17, says:

Director General BARRETT, of the Pan American Union, has issued an attractive volume entitled "The Pan American Union, Peace, Friendship, Commerce." It presents information interestingly and succinctly stated regarding the population, area, commerce, and progress of the 20 Latin American Republics, the Pan American Union, its practical work, scope, and history, and the building of unique and beautiful architecture which it now occupies, together with speeches of representative men, like Mr. BLAINE, Mr. ROOT, Mr. ROOSEVELT, Mr. TAFT, Mr. NABUCO, Mr. DE LA BARRA and Mr. CARNEGIE, relating to Pan American affairs. It also shows what Pan America has actually done for peace and arbitration—a remarkable record not generally appreciated.

The retail price, $1, represents simply the actual cost per copy of preparing and printing the book and brings no profit whatever to the institution.

While the book makes no pretentions as a literary effort or as an exhaustive study of the subject, and is intended solely as a handbook of information, it is designed to awaken wider interest in the progress and possibilities of the southern Republics and in the work of this international institution.

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## THE NEW BRAZILIAN AMBASSADOR.

It is a pleasure to welcome the new Ambassador of Brazil, Doctor DOMICIO DA GAMA, to Washington, and to membership in the Governing Board of the Pan American Union. He ranks as one of the foremost statesmen of South America and is a worthy successor of the late and lamented Ambassador, JOAQUIM NABUCO, who made such a unique position for himself in the United States as the representative of the Brazilian Republic. The high esteem with which Doctor DOMICIO DA GAMA is regarded by his country is evidenced by the following editorial which we quote from "O Paiz," a leading newspaper of Rio de Janeiro, issue of May 3:

Dr. DOMICIO DA GAMA, the newly appointed Brazilian Ambassador at Washington, is an able and experienced diplomat, who has been trained in the Rio Branco school of diplomacy, and is in thorough sympathy with Pan American ideals. His rise in the diplomatic service has been rapid. Born in 1862, at Ponta Negra, State of Rio de Janeiro, he entered upon his career as a newspaper man, serving, during the years 1887 and 1888, as Paris correspondent of the Brazilian paper "Gazeta de Noticias." He contributed to this paper a series of brilliant articles, which for their originality and distinction of style soon won him recognition as a writer. For a number of years he was a regular contributor to important Brazilian and foreign periodicals, many of his articles having later been published in book form. He is a member of the Brazilian Academy of Letters.

Doctor DA GAMA has filled a number of important diplomatic missions. In 1893 he was appointed as secretary to Brazil's Special Commission at Washington, in connection with the settlement of the question, between Brazil and the Argentine Republic, relative to the dominion over the Palmas territory, in which President CLEVELAND acted as arbitrator. He remained here two years. From 1896 to 1900



SEÑOR DON GILBERTO CRESPO Y MARTINEZ,

The new Ambassador of Mexico to the United States.

he was connected with special missions at Paris and Berne. From 1900 to 1901 he was associated with JOAQUIM NABUCO in London, in connection with the British Guiana boundary question. In 1901 he was made Chargé d'Affaires at Brussels. In 1903 he was recalled to accept a position in the foreign office, where he assisted in the negotiations which led to the purchase by Brazil of the Acre territory. In 1907 he was appointed Minister to Lima, Peru, and in 1908, he was transferred to Argentina, where his services have been of the greatest importance in promoting a spirit of amity and good will between the two countries. At the time of his appointment to the post at Buenos Aires, relations between the two countries had become considerably strained. The situation was regarded as extremely delicate, requiring the most careful handling. In a short time, however, Doctor DA GAMA, by his unfailing tact and courtesy, had soothed and allayed the existing irritation, and soon won the respect and admiration of all classes of Argentine society. The able manner in which he has filled that post, which is for Brazil the most important after that of Washington, has added greatly to his reputation. He was vice president of the Fourth Pan American Conference, and represented his Government at the recent independence celebration of Chile.

In Doctor DA GAMA it is confidently believed that Brazil will have not only a representative who will do it honor, but one who may be relied upon to strengthen still further the cordial relations existing between the two countries. His appointment has elicited favorable comment from the leading newspapers of Brazil, and may be considered as a guaranty that the high standard of diplomacy set by his distinguished predecessor will be thoroughly maintained.

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## COMMENT OF THE SOUTH AMERICAN JOURNAL.

Among the leading publications of the world giving publicity to matters affecting the prosperity and development of South and Central America is "The South American Journal and Brazil and River Plate Mail," published weekly in London. Under the head of "Notes and comments" in the issue of June 3, 1911, it makes the following reference to the Pan American Union and to the book entitled "Pan American Union—Peace, Friendship and Commerce," recently prepared by the Director General. In view of the standing of this newspaper, it is a pleasure to quote below what it has to say on these subjects:

The attempts which the United States Government are making to foster their trade with Latin America, and to capture as much as possible of that at present existing between the South American States and Europe, have been for years most thorough and on a large scale. Perhaps the greatest assistance is rendered to these endeavors by the Pan American Union, which, under the able directorship of Mr. JOHN BARRETT, issues, from time to time, handbooks of considerable interest and value to American citizens engaged in trade with the southern half of that continent, while the Union itself, by means of its library, which contains over 20,000 volumes, and its statistical registers and records generally, has probably done more to foster this trade than any other organization. The expenses of this Union are borne by the 21 American Republics, each contributing its quota based upon the number of inhabitants, and there can be no doubt that the benefit is mutual.

Many of the reports contain trade statistics and hints of great value, and its handbook publications, while not neglecting the commercial interests, at the same time are well illustrated and give descriptive records of the countries, which can not fail to be of great utility. We have before us a copy of the "Pan American Union—Peace,



SEÑOR DR. LUIS MELIAN LAFINUR,
Retiring Minister of Uruguay to the United States.

Friendship and Commerce," written by Mr. JOHN BARRETT, which has just been published. It contains as a frontispiece a colored illustration of the new building of the Pan American Union at Washington, D. C., and is dedicated to Mr. CARNEGIE, who has rendered such valuable assistance in contributions toward the cost of Congress buildings, etc. The various Latin American States are briefly described, steamship facilities dealt with, illustrations of personal travel given, and area and population figures are not forgotten. Attention is drawn to the tendency to settle boundary disputes by peaceful methods, and reference is made to the fact, frequently recorded in our columns, that the unrest and reports of revolutions are mostly exaggerated, and the opinion advanced that when actually occurring they are often a sign of progress and not retrogression. This little book is published in the United States at the price of $1, which is stated to be the actual cost of production, and is a good illustration of how information and books should be issued, whose object is the fostering of trade and commercial relations. Undoubtedly American merchants and traders have in this Pan American Union an organization of much practical utility, and one which is unfortunately lacking to British traders. The commercial intelligence department of the Board of Trade is no doubt useful in its way to British merchants, but its methods can not compare for efficiency with those of the Pan American Union.

## THE CHANGE IN THE MEXICAN AMBASSADORSHIP.

It is to be sincerely regretted that the Ambassador of Mexico, Sr. Don MANUEL DE ZAMACONA, is to return to London. He has made such a strong place for himself in the diplomatic, official, and social life of Washington during his short stay here that it was hoped he would remain longer. The health of his family and the needs of the Mexican Government in London, however, require his presence there, and he will probably be leaving Washington about the time this issue of the BULLETIN goes to press.

In this connection it is gratifying to note that Señor ZAMACONA is to be succeeded by a diplomat of high standing, profound scholarship, and extended experience, Sr. Don GILBERTO CRESPO Y MARTINEZ, the present Ambassador of Mexico in Vienna. Señor CRESPO has attained a position in the official life of Mexico which thoroughly qualifies him for his new post, and he will receive a cordial welcome when he comes to Washington, not only as ambassador, but as the new representative of that country on the Governing Board of the Pan American Union.

## CHANGES ON THE GOVERNING BOARD.

The Republics of Colombia, Honduras, and Uruguay have appointed new diplomatic representatives at Washington. It is our pleasant duty to welcome the new members of our Governing Board, while regretting the separation from its membership of men like Dr. LUIS MELIÁN LAFINUR, of Uruguay, now a member of his country's Congress; Dr. FRANCISCO DE P. BORDA, of Colombia, and Dr. LUIS LAZO ARRIAGA, of Honduras, who during their term of service in Washington aided very materially



Photograph by Harris-Ewing.

SEÑOR DON FRANCISCO DE P. BORDA,

Retiring Minister of Colombia to the United States.

in the development and progress of the Pan American Union by their advice and ready cooperation in our work. Colombia is now represented by Gen. PEDRO NEL OSPINA, Honduras by Dr. ALBERTO MEMBREÑO, and Uruguay by Dr. CARLOS M. DE PENA, a selection which insures to the Pan American Union that good will, real interest, and cordial cooperation necessary to its continued success.

## THE ANNUAL REVIEW FOR 1911.

The staff of the Pan American Union is now busily engaged preparing the data for the "Annual Review" numbers of the MONTHLY BULLETIN which will form the next few issues. The great demand during the past year, not only for the BULLETINS containing this material, but for the special pamphlets reproducing the 1910 review of each individual country, proves the value of this compilation, and requires that great care should be exercised in its preparation. The "Annual Review," as a whole, contains the most complete résumé of general, up-to-date, descriptive, and statistical data of all the American Republics which is published, and is thoroughly useful, not only to the person who already takes deep interest in Pan American affairs, but to all those who wish to become acquainted with the countries comprehending the Pan American Union.

## LAKE MOHONK CONFERENCE ON INTERNATIONAL ARBITRATION.

The seventeenth annual meeting of the Lake Mohonk Conference, held from May 23 to May 26, 1911, was one of the most important events in the history of that organization. Nearly 500 members were present as the personal guests of Mr. ALBERT K. SMILEY, the owner of the beautiful Mountain House over Mohonk Lake, where the Conference met. The main topics discussed at the Conference were "The Organization of the Arbitration and Peace Movement in the United States," by Dr. JAMES BROWN SCOTT, a well-known authority on international law and Secretary of the Carnegie Endowment for International Peace; "The Influence of the United States on the Peace Policy of the World," by Sr. Don IGNACIO CALDERÓN, Minister of Bolivia in the United States; "Patriotism and Peace," by Baron D'ESTOURNELLES DE CONSTANT, a member of the French Senate and of The Hague Court, founder and French President of the Association for International Conciliation; "Arbitration in Latin America," by Mr. FRANCISCO J. YÁNES, Assistant Director of the Pan American Union, who attended the Conference representing this institution; and "The Great Northern Peril," by Hon. JOHN HICKS, former United States Minister to Peru and Chile. Dr. PAUL S. REINSCH, of the University of Wisconsin, and member of the Third and Fourth Pan American Conferences, spoke on the subject of "An International Court," a topic also discussed by the Hon. JOHN W. FOSTER, former Secretary of State of the United States. Hon. OSCAR



DINNER TO THE HON. FEDERICO VELASQUEZ,

Minister of Finance and Commerce of the Dominican Republic, at the Holland House, New York City, June 12, 1911.

S. STRAUS, member of The Hague Court and former American Ambassador to Turkey, discussed "Business and International Arbitration." Many prominent men were present, who came from England, Germany, Canada, China, and other parts of the world in response to Mr. SMILEY'S invitation, under whose auspices these conferences are held, ably seconded by Dr. NICHOLAS MURRAY BUTLER, President of Columbia University, as the presiding officer of the Conference, Mr. H. C. PHILLIPS, Secretary of the Conference, and Mr. DANIEL SMILEY.

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### ADDRESS OF SENATOR BACON ON THE MEXICAN SITUATION.

One of the most effective brief addresses delivered recently in the United States Senate was that made by Hon. AUGUSTUS O. BACON, of Georgia, member of the Foreign Relations Committee, on Tuesday, May 9, upon the Mexican situation, in response to the remarks of Hon. WILLIAM J. STONE, of the State of Missouri. Below we quote one of the striking paragraphs from Senator BACON'S remarks:

I think when the historian comes to write the history of the past 13 years he will say that our little War with Spain did more to revolutionize the political institutions and the constitutional limitations of the United States than did the great Civil War or all the wars combined which we have had since the foundation of the Government. For us again to be plunged into war is not only to bring about a great effusion of blood, not only to disturb the relations which should exist between us and our neighboring Republic, and I may add also the relations which exist between us and all of the Republics to the south of us to the extreme end of Patagonia; not only that, but we are to jeopardize, and not simply to jeopardize, Mr. President, but certainly to injure and jeopardize our own institutions.

Mr. President, in my opinion the highest duty of the American people at this time, so far as that situation is concerned, is to avoid that which will intensify or aggravate it in any way; that we should say to that people: "While we deplore it, we do not desire in any manner to interfere with you in your internecine strife; we wish for your prosperity; we wish for your peace; we wish for the establishment of institutions which shall conduce most to your prosperity. In the meantime we earnestly hope that nothing shall occur to produce, and shall endeavor to contribute all in our power to prevent anything which shall produce, friction between the two countries." And to our own people, when a fight is on the other side: "Do not climb the housetops and the trees as spectators to witness the combat. But as it is something in which we can not take part, as it is something in which we are not the combatants, as it is something in which a retreat from the scene of danger does not involve any possible presentation of a feeling of cowardice or intimidation, when the battle comes, if come it must, get out of the way of danger until it is over. That is the best that can now be done. And whatever damage comes, whatever injury is inflicted, in time we will endeavor to the best of our ability to see that you have reparation."

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### NEW ORLEANS AND LATIN AMERICAN TRADE.

The Pan American Union wishes to congratulate the New Orleans Board of Trade, and PAUL D. MACQUISTON, Secretary of its Foreign Trade Bureau, on the plans which are being adopted to increase the



SEÑOR DR. LUIS LAZO ARRIAGA,

Retiring Minister of Honduras to the United States.

trade relations of New Orleans with the Latin American countries. The Director General has recently received an interesting letter from Mr. MACQUISTON in which was inclosed a memorandum giving an idea of the kind of work he is planning to do and is already carrying out. The Pan American Union will be glad to cooperate in every way it can for the success of this movement, and believes that effort of this kind can not fail to bring good not only to New Orleans but to the countries as well with which it is building up a commerce.

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## TRAVEL BETWEEN NORTH AND SOUTH AMERICA.

The Pan American Union, through the MONTHLY BULLETIN, addresses of the Director General and other officers of the staff, and correspondence, has endeavored to develop interest in travel to Latin America and to make more Americans of both continents journey back and forth in order that they might become better acquainted, and promote in that way both commerce and friendship. Below there is a quotation from a letter recently received from Mr. LORENZO DANIELS, of the firm of Busk & Daniels, agents of the Lamport & Holt Line, which contains an interesting statement and suggestion:

Our efforts in the Argentine Republic to induce travelers to Europe to come via New York is bearing some results, as we understand that the *Vasari*, now on the way up, has through tickets for a number of such passengers.

The travel from Argentina to the countries of Europe is, as you know, of the same character and proportionate volume as our own travel across the Atlantic, and our opportunity for increasing travel is largely to divert a portion of this foreign traffic to come via New York, visiting the States, and then proceeding on to destination. The Atlantic cabin travel amounts in statistics to about 110,000 passengers per year each way, and without definite figures before us we should imagine that the South American travel to and from Europe equaled about one-quarter to one-third of this volume. From New York it is quite impossible to combine a South American trip and European trip, but from South America the combination is quite possible.

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## STUDY OF SPANISH IN NEW YORK CITY.

Mr. FRANK S. GARDNER, Secretary of the New York Board of Trade and Transportation, has forwarded a letter to the Director General in which he gives interesting information in regard to the effort to make the study of Spanish obligatory in the high schools of New York City. Mr. GARDNER says:

At a meeting of the New York Board of Trade and Transportation held on the 12th of April, the following resolution, offered by Mr. LEWIS NIXON, was unanimously adopted:

"*Resolved*, That the mayor of the city of New York is hereby requested to instruct the Board of Education to make obligatory the study of Spanish in the higher grades of the public schools of the city of New York."



Photograph by Harris-Ewing.

GENERAL PEDRO NEL OSPINA,

The new Envoy Extraordinary and Minister Plenipotentiary of Colombia to the United States.

### A TRIBUTE FROM "POPULAR MECHANICS."

Mr. H. H. WINDSOR, editor of "Popular Mechanics," has made a complimentary comment in the May issue of his magazine upon the Pan American Commercial Conference, held under the auspices of the Pan American Union February last. While it is to be regretted that there is not space here to reproduce all that Mr. WINDSOR has to say, his introductory paragraph is quoted below:

The Pan American Congress recently held in the new building in Washington, dedicated to the promotion of closer relations between the 21 Western Republics represented, was as notable as in many respects it was unusual. Ambassadors, ministers, consuls—general business experts, manufacturers, and other interested delegates to the number of over 1,200 were present. The sessions started at 9 a. m. and continued until 10 p. m., with a brief recess at noon and evening for six consecutive days, and not a minute was wasted. A full month could have been profitably employed, for, as one delegate expressed it, "I have not learned as much in the same length of time since I left college."

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### INTERNATIONAL CONFERENCE ON THE NEGRO.

The Director General has received a letter from BOOKER T. WASHINGTON, the head of Tuskegee Institute, Alabama, in which he incloses a memorandum outlining the International Conference on the Negro, which he proposes to have held at Tuskegee Institute, Alabama, April 17–19, 1912. The main purpose of this Conference is to consider methods for elevating the Negro in Africa and the West Indies. In his memorandum BOOKER T. WASHINGTON states:

The object of calling this Conference at Tuskegee Institute is to afford an opportunity for studying the methods employed in helping the Negro people of the United States, with a view of deciding to what extent Tuskegee and Hampton methods may be applied to conditions in these countries, as well as to conditions in Africa.

It is hoped that numbers of people representing the different Governments interested in Africa and the West Indies, as well as representatives from the United States and the countries of South America, will decide to attend this Conference. Especially is it urged that missionary and other workers in these various countries be present and take an active part in the deliberations of the Conference.

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### THE NEW CONGRESSIONAL DIRECTORY.

The Director General of the Pan American Union presents his compliments to the Joint Committee on Printing of the Sixty-second Congress and to Mr. JAMES S. HENRY for the quality and appearance of the official Congressional Directory just issued. It contains a vast amount of useful information, arranged in very convenient form, and with its attractive typographic appearance is deserving of special commendation.



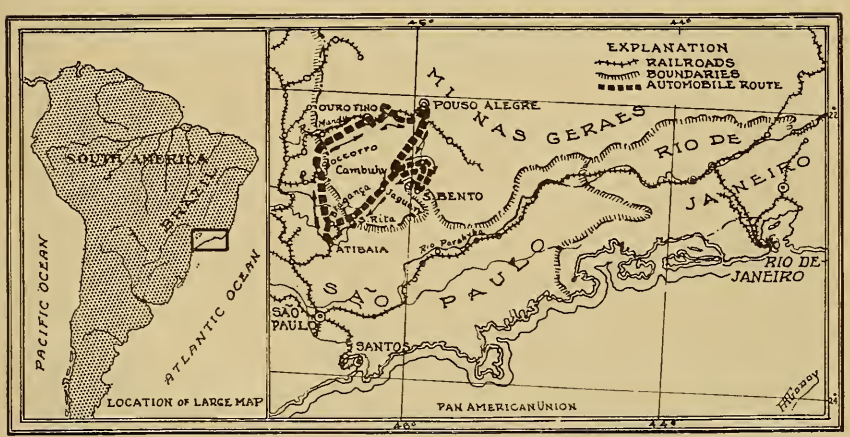
Photograph by Harris-Ewing.

SEÑOR DR. ALBERTO MEMBREÑO,

The new Envoy Extraordinary and Minister Plenipotentiary of Honduras to the United States.

# WITH AN AUTOMOBILE OFF THE BRAZILIAN HIGHWAY[a]

THE automobile is the test of a road nowadays. Time was when a saddle animal was used as a standard; if a path through the woods or across the prairie could be traversed by horse or mule, it was called a good road. Later the old oxcart, then the 4-wheeled wagon, the stagecoach, and finally the lighter carriage have successively served as criteria by which the character of a road should be judged. A beautiful bridle path over a mountain pass might delight the traveler out for a leisurely holiday,




SECTION OF BRAZIL COVERED IN AUTOMOBILE TRIP.

Dotted lines showing states included in itinerary.

but be quite unavailable for transport of the immigrant's household goods or of his produce after his farm had begun to yield a surplus crop. An oxcart could go where a 4-wheeled wagon would be unsafe, yet as this progression advances so slowly commerce is perpetually fretted by the fact that good roads seem always a generation behind the need for them.

Tested by the automobile, which is not only a pleasure vehicle but also of economic value in expediting produce to market, the United States is woefully behind most of the countries of Europe, as far as roads are concerned. Europe, to be sure, was compelled before the advent of the railway to build good roads for use in war as well as in trade. The United States, on the other hand, expanded only as

[a] Data furnished by REGINALD GORHAM.

railways went ahead of settlement and civilization, although some fine evidences of early road projections, like the Santa Fe trail, show what was in the minds of the pioneers. The increase of the number of automobiles all over the West is nevertheless a proof that road building is easy and that there is a constant demand for the utilization of them.

Tested by the automobile again, Latin America must acknowledge the criticism that her general commerce will not progress as it should until good roads thread the country, subserving, as a local stimulus, the trunk railways that are opening the wonderfully fertile interiors



BIRD'S-EYE VIEW OF THE CITY OF SOCCORRO, IN THE STATE OF SÃO PAULO BRAZIL.

Soccorro is picturesquely situated on the River Peixe, and is the center of a rich agricultural district where coffee, sugar cane, and tobacco are cultivated.

of every republic. Since the era of railway building, the coast line in most of them has been developed at the expense of this interior. Some of them have indeed demonstrated what could be done in the way of road building even in the severest tropical climate. Cuba, for example (see MONTHLY BULLETIN, December, 1908), has a system of roads which were constructed purposely for the automobile. Mexico has done much to facilitate travel by such means. The Dominican Republic is building a substantial road from the capital to the interior. Honduras built a splendid automobile road to connect the Pacific side of the Republic with the capital Tegucigalpa, and

although it was unfortunately allowed to get out of repair, it is stated that the Government is at work to make it again serviceable. Many miles of the newer highways of Salvador, while intended principally for carts drawn by oxen, are nevertheless well adapted for a heavier and mechanically propelled vehicle. In Argentina, Uruguay, and Chile, where the country is flat and has been settled for years, the automobile is becoming recognized. In Panama, across the Canal Zone, the Commission has utilized the old highway for a fine interoceanic road for all sorts of vehicles.

In and around the cities of Latin America the automobile is seen in increasing numbers; the pleasure vehicle is so far much the commoner, but taxicabs are abundant in Mexico City, Buenos Aires, and several of the larger capitals. Business machines also are beginning to play their part. In the country, however, they are as yet extremely scarce, and the lack of good roads is one of the reasons for this scarcity. Manufacturers of machines for whatever purpose should bear this in mind, and while manifesting all energy to help the sale of their wares, they might at the same time, as they do in the United States, further their salesmanship by advocating and demonstrating the advantage of good roads in any and all parts of the country.

The BULLETIN has had the opportunity of presenting in previous numbers some of the improvements of roads made in Latin America, over which the automobile could travel with as much ease and comfort as on some of the highways of Massachusetts. It happens that there has recently been received a description of an adventure with an automobile on one of the primitive roads of Latin America, like those that can be found almost any place, even in the United States. The photographs accompanying it are so illustrative of road conditions, and yet the demonstration of the availability of the machine is so conclusive, that it has been thought worth while to publish them. Naturally the hope follows that others may be induced to repeat the experiment elsewhere, for their own pleasure, and for the sake of bringing into closer acquaintance with ourselves these isolated areas of our friendly neighbors.

The traveler begins by saying that—

> there are still large portions of the earth's surface which remain undeveloped at the present day, but not one of these is so large or so fertile or shows such extraordinary future promise as the interior of Brazil. The whole country lies north of the thirty-fourth parallel, and the greater part within the Torrid Zone, although the moderate elevation renders the climate temperate and delightful. Such favorable climatic conditions, combined with the well distributed rainfall and the splendid river system, have made Brazil a land of unrivaled fertility.

He first visited the city of São Paulo, arriving there by the ordinary route of travel. Here he was astonished, as are all those who

have unfortunately misleading preconceptions of Brazil, to find that the city was beautifully built, the business of the place enormous, and that in the matters of education and civic affairs it could be compared creditably with most cities of its size in Europe and America. He has a perfectly valid criticism against—

most visitors to Brazil who confine themselves to seeing Rio de Janeiro and São Paulo, and perhaps a single coffee plantation. A trip into the interior is necessary, and will be found most interesting and instructive, showing, as it does, the real agricultural and mineral wealth of the land, and bringing one into contact with the genuine Brazilian country. Such an excursion is especially valuable when the services of the



IN BRAGANCA, STATE OF SÃO PAULO, BRAZIL.

The streets in the interior towns of Brazil are usually good, and suitable for vehicles of all kinds. Horses and oxen are the common traction animals, but even goats and sheep are employed for lighter traffic. If inexpensive and simple automobiles were introduced, they would ultimately find a market.

railroad are dispensed with and one's way is made through the country roads and villages not yet reached by it. More interesting still is it when made by automobile, such an unusual method for that district, carrying with it pleasures and difficulties never encountered by one on horseback.

The author of the article had the advantage of making such a trip in the company of a friend living in São Paulo and owning an automobile there. The extent of ground covered was 500 kilometers (310 miles), and the excursion lasted 23 days, in October, 1910. The accompanying map shows that the northern part of the State of São Paulo and the contiguous part of the State of Minas Geraes was

the area traveled over, a settled and well advanced portion of the Republic. In many ways the country and the towns are progressive and public spirited, but in the matter of good roads, what economical advantage is implied by them, and how much the automobile can add to the solution of industrial prosperity, the section is far behind and needs as much education in that regard as do many sections of the United States and elsewhere.

The machine was shipped by rail to the station of Atibaia, on the São Paulo Railway, 76 kilometers (about 48 miles) from the capital. This is a thriving town of something over 6,000 inhabitants, dating from 1750, and lying in the center of coffee and grain plantations, but active also in the production of quantities of skins and hides. The railway runs northward as far as Bragança, but the road used by



IN MONTE SIÃO, STATE OF MINAS GERAES, BRAZIL.

As the automobile advanced into the interior of the country greater opportunity was offered for contrast between the modes of travel. The old-fashioned oxcart with solid wooden wheels was seen on the same road over which the modern machine was running.

horse and oxcart was preferred for this part of the journey. In Bragança the—

greeting was an enthusiastic one, especially from the younger members of the community, who were as sorry to see us leave as they were glad to welcome us, because our visit had livened things up quite a bit. Their first sight of an automobile was naturally a good deal of an event in their quiet lives.

Bragança lies 22 kilometers (nearly 14 miles) north of Atibaia, and is somewhat larger, the region around about it being more mountainous and wooded, but still devoted chiefly to coffee and agricultural products. The city has good water and drainage systems, broad streets, and is in most ways progressive. The next stop was at Soccorro, a distance of 39 kilometers (24 miles) north of Bragança

and across country, as the railway had not yet invaded that part of the State of São Paulo. On this stretch the tourist—

met with some terribly bad roads; one place was so steep and slippery on account of the mud that it took about two hours to cover 50 feet, and then it was done only by getting five men to assist the engine by hauling on blocks and tackle which had been tied to the trunk of a tree at the top of a hill.

Soccorro belongs to the municipality of Amparo. Municipality in Latin American political subdivisions means about what a township does in the United States. Amparo is one of the most progressive cities in the State; the city has over 15,000 inhabitants, modern



THE SCHOOL CHILDREN IN MONTE SIÃO, STATE OF MINAS GERAES, BRAZIL.

The automobile had never before been seen in this town, and it naturally created much excitement among the people. A school was dismissed in order to look at the machine, and some of the children had the happiness of getting a ride, while one man shot off fireworks in honor of the event.

improvements like electric lights, telephones, fine and new public buildings and parks, schools, hospitals, and a theater. Soccorro is itself, however, a city, its charter having been issued in 1883. Lying on the left bank of the River Peixe, it is the center of rich coffee plantations, but sugar cane and tobacco are also cultivated.

The machine was then driven to Monte Sião, just across the border line between the States of São Paulo and Minas Geraes. The measured distance by straight line is given at 23 kilometers (14 miles), but by even the best road available it was much longer and took many hours of hard travel to cover. Monte Sião is one of the parishes (*freguezias*) of the municipality of Ouro Fino, and is only a small town which had

local significance when State boundaries were of more importance than they are at present, but which will grow now as the railway develops the place. The travelers enjoyed it, however, because—

at Monte Siāc we were given a great reception; immediately on hearing of our arrival the girls' school and the boys' school both gave their pupils a half holiday so that they might have an opportunity to see the car. So enthusiastic were the people themselves, both old and young, that the school girls, all in uniform, grouped themselves by the side of the car to be photographed, while one man let off skyrockets in our honor in front of the hotel.

We then ran on to Ouro Fino, which we reached after much hard work. The roads were very narrow and had a rut about 2 feet wide and 2 feet deep on one side, as a rule.



IN POUSO ALEGRE, STATE OF MINAS GERAES, BRAZIL.

The city of Pouso Alegre is beautifully situated in the midst of a well-developed agricultural district. It has fine public buildings and schools, and even a municipal theater. The streets are well kept and offer easy running for a machine.

It was quite startling to have the wheels of the car fall suddenly sidewise into such a deep hole, and such a drop also formed a severe strain upon the wheels and axles of our machine. In many cases, where we could not straddle across such a rut, it would be necessary to fill it up entirely with earth. In one place a rut 250 feet long had to be treated in this way.

Although the roads are bad, being suitable only for bullock wagons or mules, and railroad communication is altogether lacking, these small interior towns are brought into close touch with one another by means of several excellent telephone systems. It is wonderful to find, often in the cottages of the poor natives in a lonely part of the country, that an instrument has been fitted up and is in regular use.

We arrived in Ouro Fino about half past 7 in the evening, and had been road constructing most of the time since 4 in the morning, and were naturally very tired, dirty, and hungry. We should have been glad of a wash, a meal, and a long sleep, but public

enthusiasm would not permit us to rest. We sat down in the parlor of the house of the man who was to entertain us, and talked and talked, partaking of the inevitable black coffee which in Brazil is offered to a guest at any hour of the day or night. About 9 o'clock a mild suggestion was made that we might like to wash, and after that, we were requested by the chief citizens of the town to perform a service to the community at large. We were asked to meet the president elect of the State of Minas Geraes on his arrival by rail at 11 o'clock that night, and to take him home on the automobile. We tried to get out of it, as we were so very tired, but after having had supper at about half-past 10, we felt somewhat better, and agreed to do so. The car was backed up against the depot, and after a short time the special train, bearing the president elect, steamed into the station. The band began to play, complimentary addresses were read, and his excellency came through the depot and got on the car, wondering, no doubt, at



A COUNTRY ROAD IN THE STATE OF MINAS GERAES, BRAZIL.

When the streets of a city are left behind, the rougher roads of the country district are the only highways. Some of them are passable, but others are so irregular that they must be first made over in places before an automobile can run over them.

finding such a vehicle provided for him. We started off, and as there was a nice flat stretch just outside the station, the car simply could not resist the temptation to show off her speed capabilities, and we let her go at about 40 miles an hour. Unfortunately, this left the populace, with the band still playing, way in the rear, so that on the whole our assistance in the way of giving him a triumphal reception was not quite so joyfully welcomed by the Ourofinenses as it might have been.

Ouro Fino has been a city since 1880, and the municipality, including, of course, the city proper, has a population of about 30,000. The buildings are solidly and even elegantly constructed, there being among others a fine theater of which the people are justly proud. South of the city are the well known thermal springs of Caldas, and the region round about, while given principally to the growing of

coffee, has a high reputation for its dairy products. The people of Ouro Fino are noted for their affability and hospitality, and since the opening of the railway, by which Ouro Fino has now secured through connection with both São Paulo and Rio de Janeiro, about 500 kilometers (310 miles) to the east, this district is becoming better known. As the name implies, fine gold was once found in the neighborhood.

Pouso Alegre was the next stop of the tourists. This city is one of the most beautiful spots in the southern part of the State of Minas Geraes. The River Mandú passes close to the town, and adds to the charm and the fertility of the district. The population of the munici-



THE AUTOMOBILE CROSSING A STREAM IN THE INTERIOR OF BRAZIL.

The smaller streams in Latin America seldom have bridges over them, so that foot passengers, saddle animals, and carts must wade or ford across. The automobile is no exception to the rule, and any proposed trip with a machine should be organized with this feature in mind.

pality of the same name is about 25,000, all occupied in the cultivation of cereals, sugar cane, tobacco, cotton, and coffee, although the institutions of the city are fostered in good schools, public buildings and parks, a theater and a lecture hall as well.

The route now turned southward, and the travelers halted for a needed rest at the town of Cambuhy, still in the State of São Paulo, and within the municipality of Jaguary, which was visited later, but at Cambuhy they made a detour eastward, where they once more crossed just over the line into the State of São Paulo as far as the town of São Bento. This is a small place, the entire district having no more than about 15,000 inhabitants, but with promises of growth by

means of the railway that connects them with Taubaté on the Brazilian Central. Back again, after this, over the same road to Cambuhy, they proceeded southward to Jaguary, again in the State of Minas Geraes, where another stop for rest was made.

Jaguary is a city dating back to 1766, although its charter was formally granted in 1868. It lies 813 meters (2,667 feet) above sea level, and is distant from Rio de Janeiro about 400 kilometers (250 miles), and somewhat closer to São Paulo, the railway station on the line connecting the two cities, being 75 kilometers (47 miles) away. The country roundabout, like most of that through which the car



NEAR POUSO ALEGRE, STATE OF MINAS GERAES, BRAZIL.

Roads may be so unavailable for an automobile that it is wiser to leave the highway and to cut across country through fields or thin woods. In such a case going may not be bad if great impediments like trees, rocks, or thickets can be avoided.

passed, is agricultural, coffee taking a prominent part, but cereals and vegetables also are cultivated. The population is not large, not over 3,000 in the town, but the municipality spreads over four well-settled parishes. By the next stage they reached Santa Rita da Extrema, on the border between the two States (São Paulo and Minas Geraes).

The next and final stop, where also the journey ended, was Bragança. This completed the 500 kilometers trip and, considering the difficulties encountered and the frequent detentions for social purposes, was a fair amount of travel. The day's run averaged about 22

kilometers (13 miles), and, although undoubtedly slow, it is, nevertheless, about equal to the movement of an oxcart over the same character of road. It may not equal the pace of a pack mule, who in Latin America goes ahead at the proverbial rate of about 3 miles an hour, which, if a day is counted as of 10 hours, brings the average to something like 30 miles from beginning to the end of any trip longer than two days. Even considering the state of these primitive roads, greater acquaintance with them and the simplest of repairs at little cost would add 100 per cent or more to the efficiency of a



SOME OF THE DIFFICULTIES IN AUTOMOBILING IN THE INTERIOR OF LATIN AMERICA.

Many roads have been used for years by heavy two-wheeled carts, which are sure to wear a deep rut on one side or the other of them. Oxen may be able to pull the vehicle out of trouble, but the strain on an automobile is too great for safety. In such a case it is necessary to fill in the rut to make it on a comparative level with the road, or in emergency to haul the machine forward by the best traction power at hand.

machine. If once the intelligence of the people and their ambition were aroused to an understanding of the advantages of the automobile in all phases of their daily life, they would not be slow to improve their roads to the requirements of a low-powered car. The need for smooth and graded highways would be recognized later, and when that time came and the roads were improved to that standard there would be opened to the world in practically every portion of Latin America a wealth of opportunity for travel, as far as beauty of scenery, charm of people, and subject for serious study are concerned, that would rival many sections of Europe.

The country traversed was agricultural. Its products were coffee, with the cereals, vegetables, and fruits. All of these must be transported to market, and the greater the distance from the railway the stronger becomes the necessity to place them quickly and unspoiled before the consumer. The farmer may be conservative, but he is not altogether asleep, and as the Governments of Latin America are generally willing to back him in any worthy desire for improvement, it is certain that more pioneer work of this kind will produce good results.

The author of the letter concludes by saying that—

> we were proud of having run the car on all those terrible roads, uphill and through streams, and all without tire trouble or any serious mishap whatever. The car was of American manufacture and burned kerosene as fuel, an essential point when visiting out-of-the-way places where gasoline is unobtainable. It was a regular touring car, but the rear seats were removed and a large box fitted up instead to hold the tools and baggage. It was the first time the people in that part had ever seen an automobile, and sometimes they hardly knew what to make of it, although they are intelligent and were quick to pick up the good points of the machine. In the one or two places where there was no public illumination we had to use our searchlight, thus earning for our car the title of the "fire-eyed devil."

But just as the "devil wagon" in this part of the world has passed the stage of being a ridiculed curiosity and has become valued for what it can accomplish in lightening man's daily toil, so in the less frequented areas of America it needs only to be introduced to be appreciated, and good roads will follow as a matter of course.



# THE NIPE BAY COUNTRY—CUBA[a]

No traveler in Cuba should fail to visit Nipe Bay. In Havana, Camaguey, Santiago, he sees the Cuba of yesterday, picturesque and hoary, persisting yet alongside the Cuba of to-day, busy and alert; but at Nipe Bay he glimpses the Cuba of to-morrow, embodied in gigantic enterprises which spring up the instant capital touches with the magic wand of industry the prolific possibilities with which Nature has endowed eastern Cuba—"Through the Land of Promise."

On the summit of the Pinales Mountains (alias the Nipe or the Mayari range, on the north shore of Oriente Province in Cuba), at an altitude of 1,900 feet above the level of the sea, there is a hotel—The Pines—from the veranda of which guests overlook a panorama the like of which is not elsewhere in Cuba, nor probably in all the world.

The mountain ridge rises abruptly from flatlands about the Bay of Nipe. Therefore from its top the view is unobstructed over all that great landlocked harbor, beyond it to Banes Bay, and even farther; the radius of vision is 25 or 30 miles. Within that radius, laid like a colored map spread for inspection, one sees—in Central Boston at Banes—the second largest sugar mill in Cuba, surrounded by far-reaching fields of cane intended to feed its gormand crushers; and, at Saetia, the largest fruit plantation in the island, with 6,000 acres of banana groves, to say nothing of citrus-fruit orchards, pineapple fields, sugar cane, and immense possibility for further development in uncultivated portions of the 40,000 acres the Dumois-Nipe Company own. At the nearer edge of Nipe Bay, flat (as seen from that height) and crossed with fire lines till it resembles green checked gingham cloth, is Preston, the sister sugar estate to Boston; on a promontory projecting into the water is its mill, with a red-roofed town laid out in neat rows all about it. The 23,000 acres of cane in its fields plus the 25,000 acres which supply Boston together constitute the largest area of sugar cane grown under administration in this country.

Neither the Nipe Bay Company, which owns Preston, or the United Fruit Company, which owns Boston, has any *colonos*. Closer still, at the foot of the mountain range, is the old town of Mayari, on a bluff above the sinuous Mayari River. Its banks were the first *vegas* Europeans cultivated in Cuba; they are still famous for fifth-grade tobacco, a strong quality, exported principally to Germany for use in domestic manufactures there. To the right, as one

[a] By I. A. Wright, Editor, The Cuba Magazine.



THE DOCKS AT ANTILLA, THE NORTHERN TERMINUS OF THE CUBA RAILROAD

looks down, seen through a pall of smoke, is Felton, the Spanish-American Iron Company's town, grown up around a great electric powerhouse, a model machine shop it operates, and the unique nodulizing plant, with very modern improvements in feeding and handling, wherein is treated iron ore brought down to it over inclines and by railroad from the mines at Woodfred, where the hotel, The Pines, is situated. This is one of the greatest mining enterprises in the world. The iron deposits cover more than 40 square miles. The average depth is estimated at 15 feet. The ore is about 58 per cent iron. Across the bay again, at the far left, is Antilla, the northern terminus of the Cuba Railroad, which places all this region in communication with the rest of Cuba, just as Munson Liners from New York and tramp steamers from everywhere keep it in touch, through Antilla, with the world in general.

In brief, as one looks down from the veranda of the hotel there at Woodfred one sees investment that has been made within the last 12 years (most of it within the last 8) to an approximate tota of $60,000,000. It is United States money.

For mile on mile without the boundaries of the lands held by the five great foreign companies named, thick forest extends, rarely broken by any clearing, passable only over trails *macheted* through thick jungle. Strange knotted tendrils hang from the tree tops; burrs and seed pods resembling unpleasant insects are thick in the shubbery. From hiding in the tops of *majaguas* and cedars, or among the foliage of native limes and wild orange trees, yellow with their fruit, sleek black and very handsome brown birds send forth their curious, resentful comment. It is difficult to believe, despite vicious appearances, that there is nothing desperately evil here. There are no dangerous animals. The wild dog and the little boar are more fearful of man than he of them. There are no deadly plants. Only the *guao* tree is shunned. This wilderness is the property of Cuban and Spanish owners who have, as yet, undertaken no development whatsoever.

The Nipe Bay country is accessible by boat: The Royal Mail Steam Packet Company maintaining a direct weekly service from New York; Munson Line steamers carrying passengers and freight to and from New York; Herrera coasters plying all along the north shore; fruiters; tramps chartered to transport sugar and ore; Cuban sailing craft of every pattern—all enter, some regularly, others irregularly, as traffic makes it profitable. It is accessible by rail, from other points in Cuba, via a branch of the Cuba Railroad which strikes north from Alto Cedro, on the trunk line between Havana and Santiago de Cuba, over an intervening distance of 31 miles.

From Alto Cedro to Antilla the railroad tracks run through woods so thick the train appears to thread a narrow aisle; the jungle seems

to be with difficulty held back from closing over the rails like green waves engulfing metal ribbons thrown to them. Section houses have all the appearance of being about to disappear in an onrushing sea of vegetation.



STORM BREWING ON NIPE BAY.

At Dumois the Cuba Railroad crosses the United Fruit Company's private narrow-guage line connecting that junction with the town of Banes, with the mill, with plantation headquarters—in fact, with every part of Central Boston. The United Fruit Company operates



THE FIRST INCLINE OUT OF PIEDRA GORDA ON THE WAY TO WOODFRED.

The Valley of Mayari lying at the foot of the hill.

a mail train between Dumois and Banes; cars in which a few rough seats are arranged meet the train from Alto Cedro, in which employees, laborers, and, in truth, all others who wish to make the trip are at liberty to do so.

The route followed between Dumois and Banes, 25 miles over United Fruit Company lands, is an arc of a great circle. From low hills, on one hand, where the haze lies irridescent in hollow and on height, to low hills, on the other hand, no less varied in their hues, there are cane fields. When the writer saw them, at the commence-



RAILROAD FROM PIEDRA GORDA TO WOODFRED.

The second incline along this route is here shown.

ment of a grinding season, they grew rank and succulently green. At one point a bared brown patch in a field corner showed where the *guampara* (cane-cutter's knife) had been at work, and a loaded cane train, rattling past with right of way over even the manager's special, was further indication that the *zafra* was on.

Here and there, in the course of the journey from Dumois to Banes, the train passes buildings and groups of buildings. There are several settlements within plantation limits. There are railway stations at junctions and sidings; the movement of all traffic is regulated from a central dispatcher's office at Banes by means of a

telephone system and a blackboard chart of the estate whereon a peg indicates the exact position at the moment of every wheel of stock rolling.

At Tacajo, a settlement which is the center of lands the United Fruit Company recently acquired, is an orchard of citrus fruit trees some 200 acres in extent. It is now five or six years old and is in plentiful bearing. The trees, however, have not been properly cared for; the fruit is not of the quality or the appearance it should be. Though thousands of boxes of fruit might be gathered, no foreign shipments are being made because expenses, favorable as transportation facilities would appear to be, are considered too high, in comparison with prices this fruit brings, to make the business remunerative. There is some local sale. This grove was planted five or six years ago by former owners of all this property, Messrs. Dumois representing, at the time they sold, the Banes and Sama Fruit Companies, growers and shippers of bananas. They had come into the region about 10 years before (that is, about 1889), and, out of primeval forest, developed a banana plantation which drew fleets of fruiters into Banes Bay to carry away, one season, a million and a half bunches.

In 1899 the United Fruit Company, as it exists to-day, resulted from a combination of interests and the purchase of still others, among them the Banes and Sama Companies.

The United Fruit Company proposed to continue the banana business at Banes, and did so continue it until experience demonstrated that it was not as profitable as had been anticipated. Cane then began to make its appearance in the fields; in 1901 a mill, just erected, commenced grinding; and in 1906 the cane fields closed over the last of the banana groves. Fruit was completely abandoned. The place was made a sugar plantation and given the name of Central Boston.

The plantation comprises about 90,000 acres lying all about Banes Bay and touching the neighboring bay of Nipe. Of these, 25,000 acres are under cane; the company purchases the product of 1,500 acres of other cane grown by adjoining neighbors, making a total of 26,500 acres of land producing cane for the consumption of Boston mill, which is converting it into 400,000 or 425,000 bags of sugar during the present grinding season.

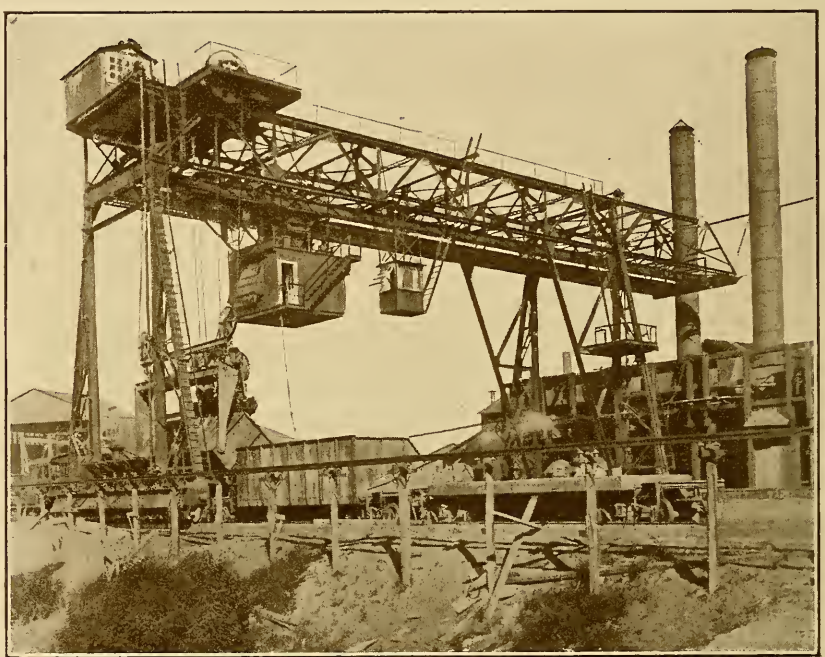
To handle this crop, the company employs while the grinding is in progress about 5,000 persons, of all classes, colors, and nationalities. In the "dead season" their number dwindles to 1,000 or 1,500, busied in the work of cultivation, repairs, and the general preparation mill, fields, and equipment must undergo.

Fifteen thousand acres of the company's land is pasture, planted to guinea and para grass. The company owns 4,400 head of stock,

horses, mules, oxen, and a few Mysore bulls, used for cross-breeding with native cows. The Mysore is a large, strong draft animal; he resists drought and he travels fast. Crossing with native cows endows his progeny with the additional good quality of tractability.

The company owns 250 oxcarts, made in its own shops, used to haul the cane from field to railway.

To transport it from fields to mill, the company operates 100 miles of private railway; the rolling stock consists of 640 cane cars (there are also merchandise cars, ballast cars, etc.) and 17 locomotives, including 2 curious inspection engines (the *cigueñas*).



DUMPING A CAR.

72 tons handled like a wheelbarrow.

There is also an ocean-going tug needed to pull steamers in and out the tortuous channel, which is the only entrance to Banes Bay. There is also a small steam launch for work inside the harbor.

The company maintains a hospital. It has a fever ward, a surgical ward, and an isolated ward for infectious cases; there is a woman's department. The operating room is completely equipped. There is little sickness at Boston. Some years ago an epidemic of typhoid occurred, since which date the company has supplied pure drinking water, pumped from the very source of the Banes River and distributed by train and cart to man and beast, no matter in what far part of the plantation employed.

There is a school open to the children of employees. It occupies a company building in the village, where the mill hands reside, close under the walls of the sugar mill itself. The teacher, paid by the company, is head and shoulders above the average public-school teacher in Cuba. He is an educated, cultured gentleman. There are two departments in the school—one for girls and one for boys. The average combined attendance is, say, 60 pupils. The instruction given is directed toward making the girls intelligent and cleanly homekeepers. The training afforded the boys is intended to form them into competent employees. There are grassy playgrounds beside the schoolhouse; gymnastics are taught and the boys are



EN ROUTE FROM FELTON TO THE INCLINE.

exercised by way of military drill. On exhibition and holidays they appear in uniform, on which occasions the little girls all wear white dresses and gay ribbons. No advantage the company offers its employees is more appreciated than this really excellent school.

Plantation headquarters are just across the river from the native village of Banes. Here are machine and car shops, the sawmill, the railroad offices, the stores, manager's office, and the offices of heads of departments. Employees' residences stand along both sides of a clean, graded street where shade trees are planted. Facing on this street is a ball ground, where the children romp. There are also tennis courts. Opposite the main office building is a park in which

a gardener, trained in the Government experimental station in Jamaica, has brought forth beautiful flowers, in well-ordered beds and groups; there is a little fountain around which water lilies float.

The company maintains a principal store with six branches, scattered among villages and settlements over the plantation (at the port, at the mill, at Los Angeles, at Guira, at Tacajo, at Negritos). It handles general merchandise. The company operates the store department not, primarily, to make money, but to assure a ready supply of all things needful. In evidence, American shoes of first-class makes may be purchased at the company store at less than their retail price within the United States. Employees are free to patronize the company stores or to buy elsewhere; across the river in the native village there are competitive establishments.

The village of Banes has about 4,000 inhabitants.

There is a post office, a rural guard station (garrison, 25 men, not including a small outpost at Tajaco). The post office and rural guard quarters are on company land in buildings the company provides.

The company pays its own force of 20 field guards. These men are licensed to bear arms on the agreement that they are liable to the call of local authorities in any case of trouble. This arrangement is usual on the sugar estates of Cuba.

The general manager's residence and the company guest house are at Embarcadero. They face the bay; from their wide porches the visitor looks out over a sheet of water wonderfully beautiful, seen through the fringe-like foliage of a row of coconut palms.

Within sight and hearing, across the water, on another point of land extending into the bay, is the heart of the plantation—the mill itself. Prosaic and dingily gray in the day, it shines at night with the thousand arc lights that keep it bright as noon; all through the night watches the steady roar of its machinery resounds. Its whistle, calling shifts of men on and off, echoes in the far hills. To it as to a magnet the cane trains come by land and the sugar ships by sea.

This mill began work in 1901 with a production of 59,000 bags; in 1909 it manufactured 373,500 bags; in 1910 it plans to make 400,000 to 425,000 bags of sugar, a production second only in Cuba to Chaparra, the largest factory in the world. The machinery in the house is of American make, excepting some crystallizers from Germany. The foundations are laid for an enlargement of the mill.



# A NEW CHAPTER IN THE HISTORY OF HONDURAS

ALTHOUGH perhaps less is known of the Republic of Honduras than of any other Central American country, yet the widespread interest which is at present being manifested in this country is destined to mark for it a new chapter in the history of its progress and development. With the appointment of Dr. Francisco Bertrand as Provisional Presi-



TEGUCIGALPA, CAPITAL OF THE REPUBLIC OF HONDURAS.

The picturesque Picacho towering in the background.

dent of the Republic, there has developed within the country a renewed spirit of hope and optimism bent on uniting and harmonizing the various elements in its new lease of life.

The rich mineral resources of the country, the splendid opportunities for agricultural development, and the industrial possibilities have for many years attracted the outside world. But it is only within a comparatively short time, however, that the real stimulus has been given to the proper exploitation and development of its

potentialities. Yet sufficient progress has already been made to have created a growing demand for detailed information concerning the latent wealth and power of Honduras.

In point of size Honduras ranks third in the group of Central American Republics. It has an area of 46,250 square miles, an extent equal to the combined areas of the States of Pennsylvania and Rhode Island. The country is politically divided into 16 Departments and 1 Territory, which are further subdivided into districts. The estimated population of the Republic is about 745,000. As yet there is no chain of intersecting railways closely connecting these various Departments—in fact, railroad construction and development in Honduras is still in its infancy—but a careful study of conditions has been made possible by means of trips on horseback into the interior country. Such visits have been made by the energetic United States Consul, Arminius T. Haeberle, stationed at Tegucigalpa, and many graphic, as well as instructive, reports have come from his pen describing them. From these we take pleasure in quoting many striking paragraphs.



ARMINIUS T. HAEBERLE, UNITED STATES CONSUL AT TEGUCIGALPA, HONDURAS.

Mr. Haeberle was born in St. Louis, Mo., 1874, and was educated at Elmhurst College and Washington University. After teaching school several years, Mr. Haeberle was appointed vice director of the Institute Ingles at Santiago, Chile, from which position he became the head of the modern language department of the McKinley High School of his native city, St. Louis. In 1908 he was appointed consul at Manzanillo, Mexico, after examination, and on January 11, 1910, was transferred to his present post.

In one of his advices Mr. Haeberle makes this interesting comment on the Capital of the Republic:

Tegucigalpa is far up in the mountains at an elevation of almost 3,500 feet, according to the most recent measurements, and the home of 13,890 "souls," according to the latest census of 1910, a delightful place in the Tropics, where every prospect pleases, with an abundance of sunshine from October until May, and with "patios" full of flowers all the year round; with glowing sunsets and cool nights. It is about a three days' ride (on mule back) from the lowlands on the south coast, and a six days' journey, using the same form of locomotion, from Puerto Cortes on the north coast. The hotel accommodations in the capital are not the best. But with the granting of

certain privileges by the Government, not only could a hotel be successfully managed, but wayside inns could also be established along the road, which travelers would gladly patronize. Aside from the poor accommodations along the road, a six days' ride in the saddle through interminable pine forests and over picturesque mountain trails would be for many an office man a healthful and pleasant change from the usual conveniences of modern transportation.

Tegucigalpa signifies "The Hills of Silver." The remarkable faculty of the Spaniards to discover the hidden treasures of the earth is a recorded fact of history, and in 1578 the gleam and dream of the hills of silver led them across unknown mountain ranges and became responsible for the founding of this city, which became the capital of the country in 1880.

After Tegucigalpa the Department of Comayagua looms up as the next most progressive section, because of its immediate prospect of development. Moreover, the capital of the Department, Comayagua,



CADETS AT TEGUCIGALPA.

Company of cadets under the leadership of Col. Luis Oyarzun.

merits especial comment, as it seems the most logical place to become either the terminus of a railway from the north coast, or the most active industrial, commercial, and railway center and distributing point for the long-looked-for Interoceanic Railway to connect the north and south coasts of Honduras.

In order to thoroughly study this Department, Mr. HAEBERLE, in company with another American, made one of his noted mule-back trips, which he so carefully describes as follows:

This Department has a population of about 25,000, is about 92 miles long from north to south, and 75 miles wide from east to west. It is composed of 6 districts—Comayagua, San Antonio, El Rosario, Meambar, Siguatepeque, and Cabanas. Although it is chiefly an agricultural district, it also possesses considerable mineral wealth, there being 55 gold mines, 10 gold and silver mines, 8 silver mines, 20 gold, silver, and copper mines, 3 gold and copper mines, and 1 gold, silver, and iron mine.

According to information received from the Governor of Comayagua there are 4,532 acres of land under cultivation where corn, beans, rice, coffee, and sugar cane are raised, and 2,167 acres of land covered with para, guinea, and gamalote grasses. The entire Department has only 54 matriculated agriculturists. There are 75 cattle ranches, the cattle being estimated as 53,934. The cattle are allowed to graze in the valley during the wet season, but are driven into the mountains during the dry. The fear of revolutions is a disturbing element in connection with the raising of cattle, and especially discouraging to those who have imported expensive cattle for breeding purposes.

The valleys of the Department of Comayagua are Comayagua, Siguatepeque, Maniani, and Rio Chiquito, the most important being the two first named.

The Consul then enters into a detailed account of the fertile valley of Siguatepeque. Commenting extensively on its rich soil, abun-



NEW BRIDGE CONNECTING TEGUCIGALPA AND COMEYAGUELA.

Virtually one city, although governed as separate municipalities. Bridge made of stone, costing 149,635 pesos, and called Puente Mallal.

dant vegetation, and alluring possibilities with the introduction of modern agricultural methods, he continues:

Siguatepeque lies 30 miles northwest of Comayagua and is separated from it by a high range of mountains called Coconita and Cocona. It is a three days' ride from Pimienta, the terminus of the railway, 57 miles from Puerto Cortes. At present a new cart road is under construction leading from the valley to Lake Yojoa, which is but a short distance from the valley, and another is being constructed from Pimienta to the northern part of this lake. The intention is to place boats on Lake Yojoa, which is about 25 miles long and 8 miles wide, and carry freight as well as passengers across the lake, thus reducing the distance considerably from Siguatepeque to the north coast, making it comparatively easy to reach the interior. Lake Yojoa, said to be a beautiful lake, is in a most fertile region, and if this plan is carried into execution, this fertile region will be developed, Siguatepeque will find a market for its products, and

possibly attract tourists to see the beauties of the lake, to hunt and fish there, or go to the valley as a summer or winter resort.

Siguatepeque was suggested as a suitable place to establish the capital of the Central American Federation when this idea was considered several years ago. Considering everything it seems to be one of the best valleys of the Republic. With an elevation of over 3,000 feet, the climate is excellent. It is an ideal place for a large city, and its proximity to the coast (after proper connections have been established) and to the valley and city of Comayagua and its productiveness insure for it a future.

Tobacco, coffee, sugar, and cattle are the chief products of the valley, but as there is no outside market for these, only enough to meet local demands is raised. These products are not raised in the valley itself, but on the hillsides, the largest coffee plantation visited being two hours' ride up the hills from the town.

It was impossible to ascertain the English names of the many different trees on account of the local terms used in describing them. Thus, there are the liquid amber,



COMAYAGUA VALLEY, HONDURAS.

The city of Comayagua was the early capital of the Republic.

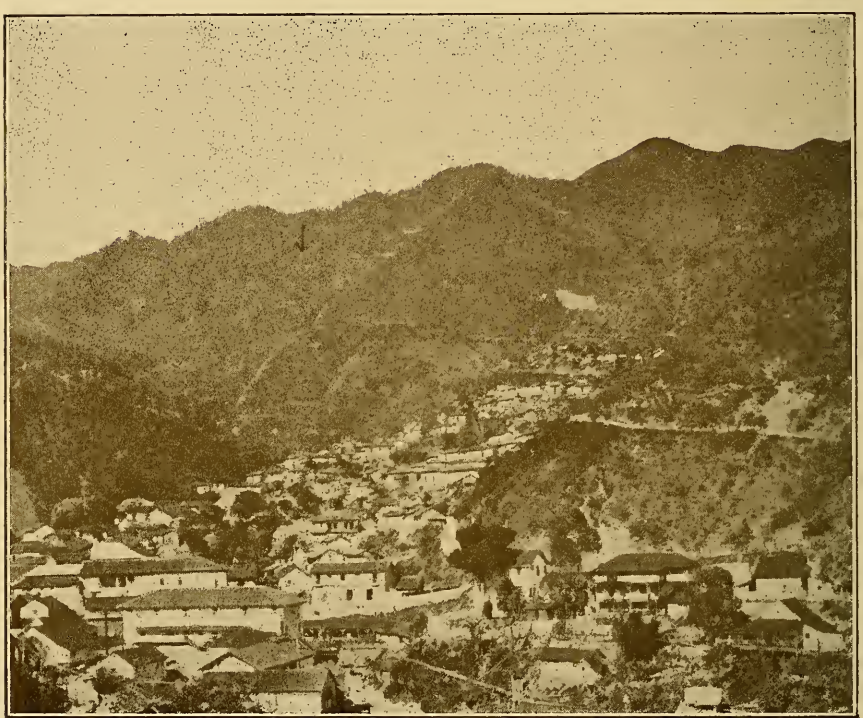
with leaves like the maple and exuding an oil used for wounds; the mahogany, the cedar, the wild fig, the "funera," a dark hardwood, the wild plum, the Santa Maria, the ash, the vara de obispo (bishop's staff), the pata tigre (tiger's paw), a hardwood, and the guachipilin (diphisa robinoides).

The level part of this well-watered valley is about 3 miles in length and 2 in width, but, including the rolling part, which is now covered with timber, the entire length from east to west is 12 miles, with a width varying from 4 to 6 miles. The soil varies from 10 inches to 2 feet, and is generally of a dark loam, with a layer of clay underneath.

The little town of Siguatepeque lying in the eastern part of the valley presents an unusually neat and clean aspect. It has about 1,000 inhabitants. The houses are surrounded by picket fences instead of the usual adobe wall. While little is raised in the level part of the valley, the gardens of some of the foreigners show the possibility of agriculture. Vegetables, fruits, etc., are grown with excellent results. Looking down from the hills, as one descends into the valley, one notices nothing but the

level tract of land sleeping in absolute peace, where one would expect life and activity cultivated fields, and orchards of all kinds.

Instead of cultivating the valleys, however, farming is carried on in the montanas, or hills, where the vegetation is dense and the soil very fertile. The idea is that there is a larger range, and that it is not necessary to fight the grass, for which the native plows are not strong enough. A small patch of ground is cleared and burned, thus destroying all weeds. The corn is then planted and grows well. But as the grass begins to grow the next year the patch is abandoned and another is burned instead. After several years, when the vegetation is sufficiently abundant to be burned down the original patch is returned to. In the valleys the range is not sufficiently great



THE MINING TOWN OF SAN JUANCITO.

This celebrated mine of San Juancito, situated about 20 miles from Tegucigalpa, the capital of Honduras, is one of the best-known mines in Central America. It has produced since 1882 over $15,000,000. In spite of the distance from transportation and commercial centers, it has been kept in good condition, and every effort is made to maintain a high standard.

to permit this roaming way of farming, and so places easy of access are neglected for such as would naturally be considered unfit for agricultural purposes on account of their inaccessibility.

It will thus be seen that agricultural methods in this country are very crude; but it must be remembered that farming is not conducted on a large scale. Each farmer raises merely enough to supply his personal or the local demand, and the most primitive methods are sufficient in most cases to supply the local markets. This, however, is not always the case. Sometimes there is a scarcity of certain articles at a certain place, and the prices therefore fluctuate at times, although there may be a great supply of the same article not far away.

At this point, we are furnished with a brief outline of how the famous "Panama" hats of Honduras are made.

As a rule, there are no hats made in Siguatepeque, Santa Barbara being the center of this industry. About 15,000 of these hats are made annually by the women of Santa Barbara. The palm leaf, from which they are made, is called "junco." The most tender leaves are selected and exposed to sulphur smoke, moisture, and the rays of the sun. The price is about 18 cents gold for two dozen leaves, the amount needed for one hat. It takes about two weeks to make an ordinary hat and one month to make a fine one.

A round block, called "horma," is used as a form for making the crown. After this part is finished a table is used, provided with one or more holes, into which the crown



HAULING HEAVY MACHINERY TO THE SAN JUANCITO MINE, NEAR TEGUCIGALPA, HONDURAS.

There is a good cart road from San Lorenzo, on the Pacific side of Honduras, to the capital, Tegucigalpa, but from this point to the mine, about 20 miles, the company has constructed its own road. Over most of the highway automobiles have gone, but on the more mountainous road animal traction is still necessary. The heaviest machinery is, however, transported to the mouth of the mine, so that it is equipped with the most modern methods for all mining processes.

is dropped and the rim woven on top of the table. These hats are sold at from $1.20 to $14, according to their quality. They are made during the wet season, as the straw breaks during the dry. Even in the wet season a damp cloth is constantly used to moisten the straw while weaving. When they are finished, they are placed in a large box and again subjected to sulphur fumes, after which they are ready for the market.

The quaint and picturesque town of Comayagua was also visited by Mr. HAEBERLE. This ancient capital of Honduras, is now a small place of about 7,000 inhabitants, and still bears the vestiges of an earlier civilization. The remnants of waterworks, the cathedral, 302 years old, with elaborate stuccowork, and containing, as believed by

many of the residents, a painting by MURILLO; the old massive ruins with ancient inscriptions, one of which bears the date of 1741, all point to a flourishing past. Of this place he writes:

This town is in the very center of Honduras, and of the fertile valley, which, according to official sources at Comayagua, is 42 miles from north to south and 24 miles from east to west.

The capital is situated between two rivers, the Chiquito, which rises in the mountains to the east and empties into the Humuya, the second river, passing west of the town and forming a tributary of the Ulua, one of the large rivers of Honduras, which empties into the Atlantic. The elevation of this valley is given as 1,900 feet, and it is therefore hotter than the Valley of Siguatepeque.



COUNTRY HOUSE AT ZAMORANO, HONDURAS.

The attractive interior patio.

Little has been done to make use of its fertility, and only occasionally one sees a cultivated field from the main road. But here again the native method of farming must be taken into consideration, and while there are vast tracts of unused land in the lower part, and it seems as if this large stretch was almost uninhabited, the hills show the fields where the native products are raised.

With modern methods beautiful fields could flourish where now the carbon, cornizuela, biscuite, and other native trees grow wild.

It may not be amiss to state that very few milk products are manufactured in this country, excepting some cheese, which is made in a very crude way. Canned butter must be relied upon exclusively. This is mostly imported from Denmark, and even the best brands are unsatisfactory. An excellent business in milk products could be

worked up, as is the case in the neighboring Republic of Nicaragua. The Revista Economica estimates that an income amounting to $700,000 gold could be had from this source. This estimate is based on Nicaraguan statistics, and it must be remembered that the cows of this country yield very little milk. The best milch cows will give at the most 5 bottles of 15 ounces each, according to the local way of measuring, while the usual amount is from 1 to 2 bottles of 15 ounces each. A good milch cow is valued at about $13 gold and the milk sells for 4 to 5 cents gold per bottle.

The principal products of this valley are sugar cane, coffee, corn, beans, sarsaparilla, some rubber, the vanilla bean, and mescal, or pita plants. Very little attention is paid to cacao, although this could also be raised in large quantities, as well as the indigo plant. The markets for these products are San Pedro Sula and Tegucigalpa.



IRRIGATION AT ZAMORANO, HONDURAS.

Irrigating the first modern sugar-cane plantation in the interior of Honduras.

On account of the heavy export duties and cost of freight to the coast, comparatively little is exported to other countries. Other products are tobacco at El Rosario, La Mision, Taulabe, and Jaitique. Coffee is raised in large quantities at La Libertad and Taulabe. Rice is cultivated at El Rosario, El Espino, and Chapulistagua.

There is a large variety of trees, but as they go by their native names alone their general designations and classes could not be given without proper investigation, which would have taken more time than could have been spared. Medical plants abound, among which may be mentioned rhubarb, ipecac, balsam, manzanilla, violet herb, lanilla, and guaco.

The valley being traversed by no fewer than 19 streams, has an abundance of water, which might be used for motive power.

There is at present a distillery of "guaro," or native rum, very near the town.

The manager informed me that it costs about 3 cents gold per bottle of 18 ounces to manufacture this liquor, and that the Government pays 7 cents therefor and sells the same for about 60 cents gold. The factory turns out from 300 to 400 bottles per day. Guaro is made of sugar cane, for which the different varieties can be used. This is left to ferment for 24 to 30 hours, and is then distilled, the weaker and stronger liquor being blended in such a way as to give 21° Cartier, the required strength for the market.

The manufacture of guaro is a Government monopoly, from which a revenue of about $400,000 is annually derived. The Government awards contracts for a period of one year in different districts, and the manufacturer is subject to a fine if the terms of the contract are not fulfilled. The distiller is obliged to send the product to any part of the district designated by the Government, and inspectors examine the ship-



EN ROUTE FROM SAN LORENZO TO AMAPALA.

Gliding through dreamland, going from San Lorenzo on the mainland to the Port of Amapala on Tiger Island, Honduras.

ments as to quantity and strength at the point of destination, comparing them with the invoice.

In the valley is a brick and tile factory which can turn out about 400 bricks and 500 tiles per day; merely enough are made to meet local demands.

Leaving Comayagua, the party started for the town of La Paz, capital of the Department of the same name. This town has about 6,000 inhabitants, with almost as many houses, and is said to have been founded in 1792 under the name of the Valley of the Rocks. The Department of La Paz was organized in 1869. It has a population estimated at 25,000 and an area of 2,600 square kilometers.

The principal subdivisions are: La Paz, Marcala, and Opotoro. Referring to the farms and products of this Department, he says:

La Paz has 21 farms, the number of cattle being estimated at 9,890; 708 acres are planted with grass, chiefly guinea. There are no large industries at La Paz.

Among the agricultural products coffee takes the front rank, the principal plantations being at Marcala and Santa Maria, the former having 500 and the latter 266. The plantations at Marcala belong to a German firm at Amapala, and the coffee is shipped to Hamburg. Other plantations are as follows: La Paz, 8; Opotoro, 75; San Jose, 41; Puringla, 10; Chinacala, 30; Yarula, 5; Santa Lena, 10; Santa Ana, 36; Guajiquire, 15; Aguanqueterique, 2. The coffee raised on these plantations during the fiscal year 1908–9, according to statistics obtained at La Paz, was 1,338,888 pounds; the total



AMAPALA, HONDURAS.

The most important shipping point on the south coast of Honduras.

raised in all Honduras during the same year amounting to 5,603,465 pounds. Other products were corn, beans, Kaffir corn, and a small quantity of wheat.

Another section of Honduras deserving of mention is the Yaguare Valley, situated about 20 miles east of Tegucigalpa. The climate is exceptionally equable and healthful, the elevation of the valley being about 2,700 feet. This district is of special interest on account of the progressive agricultural methods employed there, and because it marks the site of the most modern flour mill in Honduras as well as the largest rum distillery in the interior of the Republic.

The present capacity of the flour mill is over 150 pounds of flour per hour. Within two months after its establishment over 50,000

pounds were put on the market and found ready buyers, both in the capital and the immediate vicinity. Native as well as imported wheat were used, and as a result, a stimulus has been given to the raising of wheat in the Department of Tegucigalpa.

The sugar-cane industry, too, affords an excellent opportunity for profitable exploitation. While the sugar cane of Honduras is richer than the Cuban cane, it is much thinner, due to lack of proper cultivation. Recently planted cane, receiving all due attention, has shown a great increase both in thickness and quantity.



WHARF AND CUSTOMHOUSE AT AMAPALA.

Situated on the Pacific Coast of Honduras.

Speaking of a recent trip to the port of Amapala on the south coast of Honduras, Mr. HAEBERLE vividly pictures the journey in the following terms:

> The beautiful scenery will delight you and you will enjoy the good road, for it is the only cart road to the capital. Finally you reach the hot lowlands and are glad to see San Lorenzo, a small but important town. At this place a gasoline launch belonging to a German firm transports you to Tiger Island, where you disembark at the port of Amapala. This little ride of several hours is always interesting, but if you ever glide over the moonlit wave, among the low, overhanging bows of the trees, and through the many narrow passageways, which appear to be Venetian streets, you will want to rub your eyes to know if it is reality or dreamland that you have entered.

Summarizing, then, the existing possibilities for the productive exploitation and development of this country, Honduras offers, first

and foremost, a territory admirably adapted to the cultivation of sugar cane, coffee, beans, bananas, tobacco, rubber, coconuts, etc. Immense tracts of timber lands are available in the Departments of Mosquitia and Olancho, which should afford profitable investment. The Republic has considerable excellent agricultural and grazing lands which may be obtained very readily through the Government. And, finally, though by no means of least importance, are the mineral resources, rich in their variety and extent. Gold, silver, copper, iron, lead, zinc, tin, platinum, quicksilver, coal, are all known to occur in this country, and only because of inadequate means of communication has their exploitation been retarded. The Government, however, is now extensively engaged in road construction and repair, so that with labor as cheap and abundant as it is preliminary work of opening up mines may be carried on with comparatively small capital. It is perhaps not assuming too much to state that the next few years may see Honduras advancing with a steady and progressive stride toward a place and position fully commensurate with her vast natural resources.



# LATIN AMERICAN MUNICIPALITIES[a]

## SAN JOSE DE COSTA RICA.

SAN JOSE the beautiful, it has been called, meaning "San Jose de Costa Rica," to distinguish it from San Jose de Guatemala, which latter is only a seaport on the Pacific side of the Republic of Guatemala, important enough for the foreign commerce of the country, but otherwise of no historic or cultural interest. The first-named San Jose is, on the other hand, one of the most picturesque cities of Central America, and in many ways deserves to be classed among the best known capitals of Latin America.

San Jose, the Little Paris of Central America, is another title given it by not a few European travelers—not because of its size or cosmopolitan gayety, nor for the magnificence of its boulevards, but because of the Latinity of its people, their artistic ambitions, and the grace and elegance of the feminine element of its society. Dropping comparisons, however, an unprejudiced study of the city will show many features of its municipal progress which make it worthy of close acquaintance.

Costa Rica is the southernmost Republic of Central America, for Panama, when a department of Colombia, was politically, if not geographically, a portion of South America. Its area is only 23,000 square miles, its population but 370,000, yet the people are remarkably advanced, educationally speaking. They assert that they have more school-teachers than soldiers; their little country has accomplishments that much larger nations might emulate to their credit; and the center, geographically, politically, and socially of Costa Rica, is their capital, San Jose.

The original seat of the government of the country, while it was still a State incorporated with the captain generalcy of Guatemala, was the city of Cartago, about 13 miles (21 kilometers) from San Jose. In 1823, after separation from Spain, the local government was transferred to the latter city, which seemed to possess certain advantages that made it more suitable for the capital of the new nation.

The city had had an interesting history. Unlike some of the capitals of Latin America, which were started by intention and design, as municipal foundations, San Jose grew from very humble beginnings, and in a literal sense can not be said to have been founded

[a] By ALBERT HALE of staff Pan American Union.



SAN JOSE, COSTA RICA.

San Jose de Costa Rica, the capital and commercial center of the Republic, lies in a fertile valley 3,868 feet above the level of the sea. Its excellent climate, well-paved streets, beautiful parks, and substantial public and private buildings, surrounded by a luxuriant growth of subtropical flowers and trees, make it one of the most delightful capitals of Latin America. San Jose is connected by rail with Port Limon on the Atlantic coast and with Puntarenas on the Pacific.

at all. Neither was San Jose a well-established focus of native life and civilization, as was the City of Mexico, Cuzco, or other places famous in the Spanish conquests. The site was occupied on account of natural advantages, and as time went on the wisdom of this action was confirmed by future generations. Toward the middle of the eighteenth century it was a simple native village, termed, among other names, mostly of Indian significance, "La Villa Nueva," the new town (to distinguish it from the older town, Villa Vieja, otherwise known as Heredia), at the mouth of the Monte. In 1755 the alcalde of Cartago, who then had charge of that district, ordered that settlers in the neighborhood should make their homes in San Jose. Two years later the sparse population was increased by another increment from the near-by village of Iscasu. In 1778 a census was taken, which disclosed the fact that there were 4,911 inhabitants in San Jose (Villa Nueva).

In 1783 the meager population had even decreased to 4,869. In the year 1801, so it was declared, neither San Jose nor Heredia had been granted village charters, although it would appear that they were more industrious and sober minded than the capital, Cartago, itself. On August 12, 1803, a class in grammar was established in the settlement, a sure proof that the people were ambitious and progressive. San Jose, somewhat later, seems to have been active in the general movement for freedom from Spain, and from that time on was one of the centers of Central American discontent. Thus the town continued to grow in importance and size. In 1820 it had already outstripped Cartago, this place having, under a most liberal count, only 8,945 inhabitants, while San Jose was credited with 14,444. The revolution was declared in Guatemala on September 15, 1821, and Costa Rica followed in the early days of October of the same year. In 1823, as has been stated, the capital of the Republic was transferred from Cartago to San Jose.

A description of Villita, which was the original name by which San Jose was known, from a report made by the bishop of the diocese, which at the time embraced Nicaragua and Costa Rica, after his visit in 1751, is interesting. He says:

> Four leagues north (of Aserri, near Cartago), in a pleasant plain, is the place with the diminutive name of Villita, just about in its beginnings. There are only 11 houses of tile and 15 of straw (roofs), but forming neither street nor plaza. Water had to be supplied from reservoirs. The church is the narrowest, most humble, and primitive I have seen in all this province and has only a secular coadjutor nominated by the cura (priest) in Cartago, with no fixed income.

In all the adjacent valley were 220 tiled houses and 94 of straw, the inhabitants being engaged in agriculture, cattle raising, and to some extent, but with little success, in a search for a reputed vein of gold near by.

In 1824 the population of the capital (San Jose) was 15,472. In 1836 it was 17,965, almost 4,000 greater than Cartago. In 1844 it became 19,725; then a slow growth to 1892, when the census reported 25,359 in the city itself. In 1900 only a slight increase was noted, and in 1910 the population of the immediate residence districts can not be estimated at more than that number, although if the suburbs are included, making what in Latin America is meant by the word municipality, the total will amount to about 40,000.

In most of its aspects San Jose is modern, for it has had no haphazard constructions of tradition to overcome. The geographical



A SUBURB OF SAN JOSE, COSTA RICA.

On one side of the city lies a beautiful valley, and part of it is a natural park. It is excellently adopted to out-of-door sports, and polo is very popular among the young men.

position is at 9° 56′ north latitude and 84° west longitude (Greenwich), and the altitude is 3,868 feet (1,179 meters) above sea level, being 102 miles from Limon on the Atlantic side and 67 from Puntarenas on the Pacific. Lying in a valley protected by surrounding mountains and in the neighborhood of two small rivers, the Torres and the Maria Aguilar, the climate is usually cool, it may at times be even cold, and in the wet season (April to November) the rainfall is abundant and the humidity high; but as a rule the temperature is delightful, making life out of doors most agreeable and arousing in the traveler the thought of perpetual spring.

The city is divided into 259 manzanas, or what would be called blocks in the United States, within four subdivisions or districts, Carmen, Merced, Catedral, and Hospital, containing 51, 39, 80, and 89 manzanas, respectively. These districts are literally the four quarters of the city, and the dividing lines that separate these districts from each other are two main streets running at right angles. One is named "Calle Central," the other "Avenida Central." Streets, of which there are about 12 on each side, parallel to the calles are numbered Calle 1 (First Street, Second Street, etc.), while those paralleling the avenida are likewise numbered Avenida 1 (First Avenue, Second



NATIONAL PALACE SAN JOSE, COSTA RICA.

Costa Rica has the unicameral system of constitutional government, and as the legislative body—Cámara de Diputados—is small, the Republic is able to house not only its Congress but many of its government departments in this one building.

Avenue, etc.), also about 12 on each side, north or south, east or west, as the points of the compass may indicate. Theoretically the method appears very usable, and in a large city like Washington may have certain advantages, but in San Jose, which is so compact, it is not always applied. For instance, assuming that each district has, according to the above count, 65 blocks, more or less, to say that a person lives on Calle Tercera Sur, Nùmero 12 (South Third Street, No. 12), gives a person at once an exact idea of the location of the house he seeks. But in practice this street nomenclature is not systematically used; most residents of San Jose have lived rather continuously

in the same home; the city being small they know each other, or at least the locality in which a householder resides, and as the older street names were changed only seven years ago (in 1904) the commoner habit is to give such well-known directions as Cathedral Avenue, three blocks on.

An interesting detail in such directions is the statement that a person lives, not so many blocks, but so and so many varas (yards), 100 or 200 or 325, as the case may be. Each 100 varas represents a city block, and it takes the stranger no time at all to understand this method of direction, which is very simple and straightforward. It is



A VIEW IN CENTRAL PARK, SAN JOSE, COSTA RICA.

A beautiful park covering an area of nearly 2 acres. The artistic iron railing surrounding the park was made in England at a cost of $30,000.

far more intelligible than the habit in England of telling the inquirer to go to the top of the street and turn to the left.

As a matter of fact, however, it is seldom that an actual and specific address is necessary. Many persons can not give even their own street and house number, but usually indicate their residence by proximity to established landmarks like the cathedral or the President's Palace, and any casual stranger in the neighborhood will answer the further question by politely accompanying the stranger to the door or pointing it out very plainly.

This digression is of value in illustrating the compactness and symmetry of San Jose. Although a few of the streets are narrow and



MONUMENT CELEBRATING THE TRIUMPH OVER WILLIAM WALKER, SAN JOSE, COSTA RICA.

In commemoration of the triumph over this famous filibusterer and his expulsion from Central America in 1857 the Government of Costa Rica decreed the erection of this monument in the capital city. It was unveiled September 15, 1895, the seventy-fourth anniversary of the independence of Central America.

winding, the great majority of them are straight and broad, leading directly from one side of the city to the other, beginning and ending at the extreme edge of town and several of them continuing away beyond eyesight into the beautiful country surrounding the city.

This country is not suburban in the significance of the word as used in the United States, because there are but few country houses or estates given over to farm work for city supplies, but here and there are gardens and yards where coffee is gathered to be cleaned, a village where native industries are conducted, and pleasant open spaces, sabanas, which seem to be common property for the people. In one of these is a polo ground, where the young men of San Jose enjoy themselves and delight the society of the capital, for all Costaricenses are born horsemen and have taken up the sport with enthusiasm.

From such outskirts electric trolley cars enter the city, there being two lines, one running north and south, the other east and west, each about 5 kilometers (3 miles) in length, crossing each other in the center of the city. The service, passing close to the public buildings and railway stations, is satisfactory and well maintained, and if demanded will be further extended, even to Cartago, 21 kilometers (13 miles) to the southeast.

Within the city itself the solidity of construction is noticeable. The squares or blocks (manzanas) measure, as a rule, 86 meters (282 feet) on a side, while the streets and avenues should be 13 meters ($42\frac{1}{2}$ feet) wide, but in neither case are the proportions exactly maintained, yet the result is rather pleasing than otherwise, because too great regularity is sure to be tiresome if not confusing. The streets are all paved, most of them macadamized. The houses are, as a rule, of one story, although in the business area very many of two stories have been built and a few of even three. In only a very few instances are there grass or garden plots in front of the buildings, the rule being that the walls rank against the sidewalk, but in the interior of practically every house is a patio with flowers, a fountain, corridors surrounding it and unroofed overhead, so that sun and rain, but in all cases fresh air, enter freely and joyfully, to contribute to the pleasure and health of those lucky enough to live within them. This feature is one of the greatest charms of Latin America, especially of places located below the line of frost, which need not necessarily be in the tropics, and especially at an altitude which removes the resident from exposure to excessive heat and cold and permits of a home life that is virtually out of doors throughout the year. It can be added, too, that nowhere is this patio life, as it may well be called, more delightfully understood than in San Jose, nowhere is the flavor of family intimacy better preserved than there, and the foreigner who has once been admitted to the real domestic society of San Jose, in and around

these quiet patios, can never forget the charm of it or the perfect hospitality of the josefinos (residents of San Jose).

As a break in what might otherwise be a monotony of street lines, San Jose has several parks, attractive and well kept. Near the station of the Northern Railway is the largest plaza, with two statues and a pretty fountain; further along is the open space used during fiestas for a bull ring, although the word is a misnomer, because bull fights in Costa Rica are simple, almost harmless affairs, in which no horses are used nor people or bulls seriously injured. Opposite the cathedral is the central or principal park with band stand and fountain,



THE PRESIDENTIAL MANSION FOR THE HEAD OF THE REPUBLIC OF COSTA RICA.

The building is a fine example of the simpler but very substantial style of Central American architecture. It stands near the center of San Jose, the capital of Costa Rica. The exterior gives no idea of the comfort and spaciousness of the many rooms or of the patio within.

the paths being tiled like a floor, while the profusion of tropical flowers and trees convinces the stranger that he is really away from the Temperate Zone. Four other smaller parks and the newer Morazán park, containing the fine statue illustrating the defeat of Walker, the filibuster, should be mentioned.

Fountains, of course, play their indispensable part in both houses and parks of San Jose, the former even greater, perhaps, than in many other Latin-American cities, and their use is due to the fact that the city has an abundant water supply brought from a considerable distance, deposited in reservoirs, and filtered before distributed



CATHEDRAL, SAN JOSE, COSTA RICA.

The Cathedral is the largest and handsomest religious edifice in the capital of Costa Rica. It is noted for the dignity and elegance of its architecture.

through iron pipes for general use. It can not be said, however, that in the matter of drainage the city is completely modern. While plans for a thorough system of sewage has been carefully thought out, it has not yet been carried into effect, but the natural irregularity of the surface and the humbler provision of earlier days seem to answer practically present-day conditions, since the health of the population is excellent and the death rate low and epidemic diseases are infrequent.

Electric lighting is general in all parts of the city, both on the streets, in public buildings, and in private dwelling houses. Power also is furnished by the company distributing the light. In this respect San Jose is fully abreast of the times and should be so, for Costa Rica is wonderfully blessed by nature with water courses and falls, from all of which during the entire year power can be obtained and transmitted wherever needed.

Being the capital of the Republic as well as the commercial metropolis, San Jose is the location of the public offices of the Government and has besides many substantial buildings of an official or public character. The National Palace is the name given usually to the structure in which Congress sits and in which most of the cabinet secretaries perform their routine duties of state. It is quiet and dignified, and, as Congress is composed of only one chamber, the Chamber of Deputies, it admirably serves its purpose of bringing nearly all active Government departments under one roof. The Presidential Palace is of different architectural pattern and characteristically tropical American. In it the chief executive of the nation lives during his term of office, and here he holds his official receptions and transacts affairs of state, although excellent quarters are provided for his private family life. The third integral division of government is housed in the Palace of Justice, one of the most recent constructions in San Jose.

Of the several public buildings of a national but not necessarily governmental function, two are prominent, when taking either a physical or mental picture of the city, above everything else in the city. These are the cathedral and the national opera house. Both structures stand for something in Latin-American nature, spiritual and artistic, and they find their prototypes in every advanced city from the Rio Grande to the Strait of Magellan, but in only few cities, and these among the largest, can more costly or elaborate structures be found. It is not misleading, even, to declare that nothing more entirely satisfying than these in San Jose exist in the Western Hemisphere.

The cathedral should not be compared with some of the more ambitious religious edifices of Mexico, although its architecture is both beautiful and elegant. It was not constructed in the time of the



NATIONAL THEATER, SAN JOSE, COSTA RICA.

This beautiful theater, one of the finest in the world, was erected from the proceeds of a tax on coffee at a cost of more than $1,000,000 gold. The edifice is of stone, trimmed with the finest Italian marble and stucco. The mosaic work was done by European artists especially employed for that purpose. The ceiling shown in the picture was the work of a famous Italian artist.

greatest boom of ecclesiastical poetry or wealth, but in its compactness, finish, and general harmony it typifies, probably to a high degree, the country of which its bishop is the spiritual head.

The National Theater is a very recent acquisition to San Jose. The first and inadequate building was destroyed in 1888, and the Government then decided to erect a permanent opera house that would be worthy of the artistic taste of the people and demonstrate the character of building toward which future architecture must aim. The result was admirable in every way, and no city in the world can show a building better adapted to the purpose or more qualified to present the best of music and the drama for all classes of society. The exterior is dignified and rather simple in ornamentation, but the



SCHOOL EXERCISES AT SAN JOSE, COSTA RICA.

This country is celebrated for its excellent schools. The National Library has upward of 6,000 volumes of scientific and miscellaneous works.

interior, while fulfilling all the canons of art, is exquisitely perfect in decoration and detail. Some of the best companies of Europe have been drawn to San Jose to give performances in this opera house, and the residents of the city and, for that matter, of the country from great distances come to the annual visits of these foreign companies.

There are numerous schools in the city, several of them conducted on an industrial system, where the pupils, both girls and boys, are taught the principles of economic work. Hospitals, asylums, banks, markets, and such public buildings as a national printing office, an observatory, a public registry, and military barracks, meet the needs of government and of various functions of municipal life. One of

the most recent structures is that for the National Library, which was erected especially for that purpose and has accommodation for thousands of books under as complete a method as can be found in America or Europe.

Altogether a total of about 5,000 houses, which would include private homes, Government buildings, and others of a public or semipublic use, are reported as making the city of San Jose if it must be considered merely as a composition of brick and mortar. For the local administration of this organization the municipality is a corporation, conducted on regular business lines. Being the capital of the nation, it necessarily bears a close relation to the national assembly, which has in some ways practical control of local affairs. There is, nevertheless, a municipal body responsible to itself. A chief of municipal works has in his charge all the activities of the city, such as street repairs, building plans and tools, or machinery pertaining to them. A chief sanitary officer has the function of preserving the health of the city. A paymaster general—not quite the same as usually understood by the title—has a broad interest in the routine progress of all departments. A municipal treasurer must, of course, be accountable for income and outgo of public funds. Other chiefs or heads of departments are about the same as in any city government elsewhere.

For the expenses of city government taxes are imposed on a three-months' basis upon commercial and industrial occupations. The list against which this tax is collected is very extensive and shows how carefully and accurately the books of the municipality must be kept. Other taxes are also collected, portions of which, however, go toward meeting national assessments, directly or indirectly. The expenses met by general taxes are those customary in the conduct of a city government, although it should be noticed that San Jose devotes a very generous amount to hospitals and asylums and such phases of public charity, which, after all, is only a means of preserving public health.

The study of municipal conditions in San Jose merely brings out the dry elements upon which the city rates among capitals. It does not exhibit the closer and more human side of a nation's or a city's progress, and in a very emphatic sense it is the strong personality of the inhabitants of San Jose which gives the city its charm and makes the visitor lose the feeling of being a stranger and impels him to wish to become an active member of that society. The criticism is occasionally heard that San Jose is "triste," which essentially Spanish and Latin word means at times slow, monotonous, quiet, inactive. If compared with Paris, Vienna, or Naples, not to mention New York, the implication has some force, because these cities are nowadays intentionally adjusted for the allurement of the foreigner, and their



A REGIMENT OF COSTA RICAN SOLDIERS.

Costa Rica has the smallest military establishment of any country on the Western Hemisphere. Her soldiers are well disciplined and have a distinct military bearing. The age of enlistment is from 18 to 40 years, and all citizens are subject to service with the colors. It is the boast of Costa Rica that the country has more school-teachers than soldiers.

liveliness is nothing but opportunity to spend money in any manner whatsoever. Naturally in a small city of 24,000 to 40,000, somewhat off the highway of travel, society must be self-contained and self-contented or it would cease to exist. But triste can never be applied to San Jose if it is intended to convey the idea that it is stupid or lacking in animation. That would be an unjust and, to one who knows the city, an impossible criticism. It is the opposite of stupid; it is alert, vivacious, energetic, and intellectual.

But to understand San Jose one must see and know the inner life. The attractiveness of the place is a satisfying feature, to be sure. Its peaceful location in a pleasant valley, a quite imposing mountain at



THE BANK OF COSTA RICA, SAN JOSE.

the back, and the surrounding hills just limiting the horizon so that in the clear air 20 or 30 miles give merely a shade of indistinctness, are all that a lover of nature could desire. Its delightful and yet invigorating climate is all that a health seeker demands, and even its rainy days, damp as they may be, detract little from the general rule, as many a refugee from near-by tropic ports or from the Canal Zone in Panama willingly testifies; its well-ordered streets, liberally supplied shops, and larger business structures keep the stranger entertained for a while, but not with the perpetual variety he may expect in Europe. Depending upon these features merely, it is impossible to fill the time continuously. Something more is needed to complete the attraction.

This something more is found in the people themselves. They form the ineradicable charm of San Jose. And no stranger should be shy through inability to convey his ideas in Castellano. Indeed, in most cases it is really a hindrance for him to try to talk Spanish, because so generally is English spoken by the Government officials, the storekeepers, and even the newsboys that it would seem a discourtesy to force a battered semblance of their beautiful language upon them. They are all educated, too, in a cosmopolitan sense. They have traveled, they have observed, and they have acquired and obtained true culture. Being Latin, they are polite, and they add to their grace of manner and word a cordial hospitality which goes far to remove any barrier the foreigner may fancy lies between him and them. If one is lucky enough to gain entrance into this society, he forgets the smallness of the place and is impressed only by the largeness of his welcome. He may be invited into the country to pass a summer outing in a coffee estate or to explore a bit in the still unknown woods and valleys of the Republic, and then his hosts and companions will become his friends. With such experiences his attachment for the people will be increased, and he will ever have a longing to return to San Jose.



# RECEPTION OF NEW MINISTERS FROM COLOMBIA, HONDURAS, AND URUGUAY

ONCE again it affords the BULLETIN great pleasure to extend its hearty welcome and best wishes to the three new members of the Governing Board of the Pan American Union. This change in the personnel of the Board comes as a result of the appointment of new ministers to the United States from the Republics of Colombia, Honduras, and Uruguay. The newly accredited Envoy Extraordinary and Minister Plenipotentiary of Colombia is General PEDRO NEL OSPINA; of Honduras, Sr. Doctor ALBERTO MEMBREÑO; and of Uruguay, Sr. Doctor CARLOS M. DE PENA.

President TAFT officially received the newly appointed diplomats at the White House on the afternoon of Wednesday, May 31, 1911. The exercises were characterized by the usual simple, yet dignified, ceremonies of such occasions. In the remarks of the new ministers, as well as in the responses of the President, expressions of kindly feelings between the nations were freely voiced, while the desire to still closer develop the ties of social and commercial intercourse between the American Republics marked the keynote of their missions.

Upon presenting to the President his letter of credence, General PEDRO NEL OSPINA said:

Mr. PRESIDENT: Nothing but a consideration of the highest order could induce me at this time of my life to accept the very honorable office of representative of my country near the Government of the United States, namely, the hope—springing from my eagerness to serve my country rather than from any mistaken estimation of my capacities of whose deficiency no one is better aware than I—that I may succeed in contributing efficaciously, with the aid of the mutual esteem and respect born of the practice of justice and benevolence, to the maintenance and cementation of the relations that have united in the past and will have to unite in the future the Republic of Colombia with this great Republic whose wealth and power destine it already to earn a special mention in the history of mankind.

It fell to my lot to spend much of my life in this country, to which I am bound by the remembrances of the best years of youth, and nothing that may enhance its good name and further its moral and physical aggrandizement, which to be lasting and enviable must be founded on justice, is indifferent to me. Hence, I may be permitted to affirm, in full sincerity, that my soul rejoices and my patriotic zeal finds encouragement in the sight of the noble and worthy trend now taken by the national sentiment—of which you have been the inspiring leader and high and characterized exponent—resolutely to seek for all international disputes and conflicts civilized

solutions dictated by justice and legality in contradistinction to force and violence, as was the prevailing rule in centuries past. In taking that course this great people is giving to the world a most momentous lesson and the most liberal example.

Under the influence of these impressions, and secure, as I am, of your good will and lofty views, it will be my most pleasant duty to serve, with the aim above indicated, the purposes by which you and the President of the Republic of Colombia are animated, to maintain and draw closer the relations between the two countries and to strive to merit the regard and consideration with which you always honored my learned predecessor.

I place in your hands the instrument which accredits me as Envoy Extraordinary and Minister Plenipotentiary of the Republic of Colombia to the Government of the United States, and, in the name of the people and Government of Colombia, I make fervent wishes for the welfare and prosperity of the people and Government of the United States and your person.

President TAFT replied as follows:

Mr. MINISTER: I am happy to welcome you to Washington, and to receive from your hands the letter accrediting you in the high quality of Envoy Extraordinary and Minister Plenipotentiary of Colombia near the Government of the United States.

I have listened with pleasure to your acknowledgment of the justice and legality which have characterized the conduct of the United States in its dealings with foreign Governments. Coming as they do from one who by reason of long residence and experience among us is so well qualified to speak from personal observation and knowledge, your words in this respect are especially gratifying to me. Animated by such friendly sentiments, there can be no doubt of the success of the high aim which you announce to maintain and draw closer the relations between the two Governments.

On my part, having the best of wishes for the prosperity and welfare of the Government and people of Colombia, I shall be happy heartily to cooperate with you in all proper ways toward the accomplishment of an end so mutually beneficial and desirable.

Sr. Doctor ALBERTO MEMBREÑO, the Minister of Honduras, then presented his credentials with the following remarks:

Mr. PRESIDENT: I have the honor to place in your hands the letter of credence which accredits me in the capacity of Envoy Extraordinary and Minister Plenipotentiary of the Republic of Honduras near your Government.

Welcome to me is the mission with which I have been intrusted, that of drawing closer, if that were possible, the good relations which bind my country to the United States of America. It affords me pleasure to say to you, sir, that these relations are spontaneous, as they mainly spring from the mutual fondness of the inhabitants of the two countries; on setting foot on Honduran soil the American finds not only a wide field for honest endeavor but hospitable people who share with him joys and sorrows, and the Honduran looks upon the American as a true friend, sometimes as a tutor who incites him to master the latest methods of modern industry. The people of Honduras will not forget that the peace they now enjoy is largely due to your friendly mediation. Your appeal to concord put an instant end to the civil war that had been started and in a brotherly embrace a veil was thrown over the past. The joyful reception given by the Hondurans to your pacific counsel proves beyond all doubt that we are nearing that state of tranquillity and order without which democratic institutions remain barren and which are the foundation of sound progress.

I indulge the hope that with your enlightened cooperation and that of your Cabinet I shall be able satisfactorily to discharge the duties of my office.

Accept, Mr. President, the wishes that I make, in the name of the people and Government of Honduras and in my own, for the happiness of the American people and for your personal welfare.

In accepting the credentials of the Minister of Honduras, President TAFT said:

Mr. MINISTER: You have been so good as to make mention in appreciative terms of the part taken by the United States in the bringing about of peace in Honduras. Actuated by a desire to serve the best interests of Honduras, I was very happy to place at the disposition of the contending parties the impartial good offices and kindly counsel of the United States toward securing a peaceful adjustment of their difficulties, and it was highly gratifying to me that, assisted by the patriotism and conciliatory attitude of both sides, this mediation resulted in the settlement of the differences which had disturbed the peaceful progress of the Republic, and in the guaranty of peace and stability of government.

Your remarks leave me no doubt that you are fully cognizant of the good will which the Government and people of the United States have for the Government and people of Honduras and of our desire that the most cordial relations may continue to subsist between them. Satisfied that it is your aim and will be your endeavor to draw even closer these friendly ties, I am happy to receive from your hands your letter of credence and to recognize you in the high quality of Envoy Extraordinary and Minister Plenipotentiary of Honduras near the Government of the United States.

I thank you for the good wishes which you extend in the name of the people and Government of Honduras and in your own. Entertaining similar sentiments for the happiness and prosperity of the Honduran people and for the personal welfare of their President, I beg you to be the medium of making them known to your Government.

The Minister of Uruguay, Sr. Doctor CARLOS M. DE PENA, next presented his letter of credence, and said:

Mr. PRESIDENT OF THE REPUBLIC: I have the honor to place in your hands the letter of credence by which the President of the Oriental Republic of Uruguay accredits me to the Government of the United States of America in the capacity of Envoy Extraordinary and Minister Plenipotentiary. At the same time I present the letter of recall of my distinguished predecessor, Dr. Don LUIS MELIAN LAFINUR, upon whom you deigned to bestow the attentions to which he was entitled by his eminent merits and his recognized and scholarly qualifications.

The Government and people of Uruguay have always manifested the most earnest desire to cultivate the best relations of friendship with the American Government and people and entertain the firm purpose of expanding their economical relations with the greatest possible liberality and at the same time coming into closer intellectual intercourse.

I shall find the greatest pleasure in discharging the duties of my mission always bearing in mind that the United States of America and its President, the illustrious Monroe, lent powerful assistance in bringing about the independence of the South American nations. Uruguay has another specia reason for the profound sympathy that draws it toward your countrymen, as the Government of the United States was, in the beginning of the last century the first to judge through its special commissioners the true situation in which the River Plate questions had been left by the prominent action of Gen. ARTIGAS, "Chief of the Orientals," the first of the American protagonists in South America to proclaim in his famous instructions of 1813 the fundamental bases of free government and federal régime that your most illustrious forefathers had proclaimed in the constitution of the State and in the Constitution of the United States.

Again, Mr. President, I am supremely glad to say that my country has always watched with great interest the progress achieved and the political doctrines professed by your great Nation, and that our common schools without casting off their own characteristics have taken as a model the organization, practice, and methods

of the North American schools as advocated by your most eminent reformers and educators.

The Government of Uruguay, engaged in great undertakings of national progress, is now seeking the cooperation of American men of science, and already counts among its specialists some of your best known professors, whose scientific services have a direct bearing on the advancement of our important cattle-raising industry, the main source of the wealth of my country.

All these close relations are beyond a doubt very gratifying and profitable to both countries.

I shall be greatly pleased to count upon your cooperation and contribute within the scope of my powers and duties to developing and if possible bringing closer these moral, scientific, economic, and political relations which, on the footing of the strictest international equality and justice, are so conducive to the well-being of mankind, contributing to cement peace and concord, maintaining independence and the reciprocal respect of the rights of nations, and the welfare and steady progress of their people.

I make wishes, Mr. President, for the greater prosperity and aggrandizement of the United States of America and for your personal happiness.

On receiving the minister's credentials, President TAFT replied:

Mr. MINISTER: It gives me pleasure to receive you as the accredited Envoy Extraordinary and Minister Plenipotentiary of your Government near the Government of the United States. Very gratifying is it to me that the Republic of Uruguay should find in the Government and institutions of the United States examples worthy of assimilation, and should seek in this country well trained men to further its scientific and educational ideals. This Government was very happy, as it always will be, in using its good offices in making the wishes of the Uruguayan Government in this regard known in the proper quarters.

The Government and people of the United States have viewed with great satisfaction the progress made by the Uruguayan nation. I have, therefore, listened with pleasure to the assurance which you give me of the desire of the Government and people of Uruguay to maintain the most cordial relations with the United States and to expand the commercial and intellectual intercourse between the two countries, and I shall be very glad to cooperate with you in the promotion of these desirable ends.

I thank you for your personal good wishes, and trust that you will find your sojourn in the United States most agreeable.

I shall take an early occasion to make in writing, through the American Legation at Montevideo, an acknowledgment of your predecessor's letter of recall.



# PROGRAM OF VENEZUELAN CENTENNIAL CELEBRATION

WITH an elaborate program consisting of official and civic functions, dedication of new works of art, and inauguration of scientific congresses, the growth, progress, and development of the Republic of Venezuela will find its true expression in the celebration of the centennial of its independence. The ceremonies of the one hundredth anniversary of independence began on April 19, 1910, commemorative of the Good Thursday on which the revolutionary movement was started. The principal celebrations, however, take place from June 24, 1911, to July 24, 1911, with July 5, 1911, as the central date, marking the first centenary of the solemn declaration of independence.

The salient features of these exercises are the various public works and improvements which have been or will be inaugurated in the course of the celebrations, and the international and scientific congresses which have been organized in connection therewith.

Under the presidential decree of March 19, 1910, providing for the program of the centenary, and superseded by another decree dated May 26, 1911, the following ceremonies and events, among others, have taken place: Inauguration of the Military Academy and of the Nautical School; reconstruction of the National Pantheon; organization of the Central Board of the National Census; inauguration of the buildings for the National Library, and the Office of Land Registration; inauguration at La Guaira of a wireless telegraph station; transfer to the Nation of the house where the Liberator was born; construction of the "Diecinueve de Diciembre" Avenue, and inauguration of the Exposition of School Furniture.

The Congress of Municipalities was held in Caracas during the latter part of April last, all the municipalities of the Republic participating and discussing questions of vital importance to their interests.

The presidential decree of May 26, above referred to, now provides for the following program:

*June 24.*—10.00 a. m.: Inauguration of the Bolivar Memorial Museum.
11.00 a. m.: Unveiling of the busts of MANUEL CEDEÑO, AMBROSIO PLAZA, RAFAEL FARRIAR, and PEDRO CAMEJO.
4.00 p. m.: Opening of the Exposition of Fine Arts.
8.30 p. m.: Opening session of the First Venezuelan Congress of Medicine.
*June 25.*—10.00 a. m.: Inauguration of the Anatomical Institute.
*June 30.*—4.00 p. m.: Reception of Foreign Ambassadors, Representatives, and Delegates to the Bolivar Memorial Congress, at Executive Mansion.
*July 1.*—9.00 a. m.: Te Deum in the Metropolitan Church of Caracas.
9.30 a. m.: Presentation of wreaths at the monument of the Liberator in Plaza Bolivar.

*July 1.*—10.00 a. m.: Civic parade to the National Pantheon, where the President of the Republic will deposit a wreath at the tomb of the Father of the Country and dedicate the completed works.
3.00 p. m.: Opening session of the First Bolivar Memorial Congress.
4.00 p. m.: Reception of the Delegates to the Bolivar Memorial Congress by the President of the Republic and the high Federal officials, at the Executive Mansion.
8.30 p. m.: Unveiling of the triptych painted by the Venezuelan artist Tito Salas.

*July 2.*—9.00 a. m.: Unveiling of the Statue of the Liberator, a gift of the Syrian colony.
9.30 a. m.: School parade before the Statue of the Liberator in Plaza Bolivar and presentation of the school children's offering to the tomb of Bolivar at the National Pantheon.
3.00 p. m.: Unveiling of the monument to RICAURTE, in San Mateo de Aragua.
3.30 p. m.: Inauguration of the "Diecinueve de Diciembre" Avenue.

*July 3.*—9.00 a. m.: Grand military parade.
9.30 a. m.: Inauguration of Surgical Pavilion.
10.00 a. m.: Inauguration of the monument to JOSE MARÍA VARGAS, illustrious sage and President of the Republic, in the National Pantheon.
3.00 p. m.: Inauguration of the new departments of the Central University.
4.30 p. m.: Inauguration of the April monument in the Parque "Diecinueve de abril."
8.30 p. m.: Closing session of the First Venezuelan Congress of Medicine.

*July 4.*—9.00 a. m.: Dedication of the tablets commemorative of the 19th of April, 1810, of the Patriotic Society of 1810, and of JOSE MARÍA ESPAÑA.
9.30 a. m.: Dedication of the tablet to JOSE FELIX RIBAS, in the old gate of Caracas.
11.00 a. m.: Inauguration of the monument to JOSE FELIX RIBAS.
4.30 p. m.: The President of the Republic will deposit a wreath at the statue of GEORGE WASHINGTON.
8.30 p. m.: Solemn session of the Municipal Council of Caracas.

*July 5.*—9.00 a. m.: Solemn session of the National Congress.
10.00 a. m.: Deposit of the Minutes of Proceedings of the Congress of 1811 in the chest made for that purpose and delivery of the key thereto to the President of the Republic.
3.00 p. m.: Inauguration of the Post and Telegraph Building.
4.00 p. m.: Closing session of the Bolivar Memorial Congress, unless the congress should decide to prolong its sessions.
8.00 p. m.: Banquet in honor of the foreign ambassadors, representatives, and delegates to the Bolivar Memorial Congress.
10.00 p. m.: Ball at Miraflores in honor of the foreign representatives and the Caracas society.

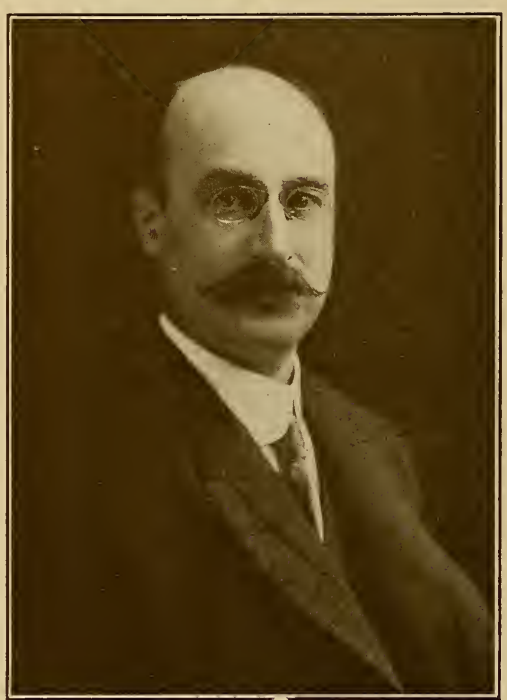
*July 13.*—9.00 a. m.: Inauguration of the steel dock in Puerto Cabello.

*July 24.*—9.00 a. m.: Inauguration of the tablet dedicated to the memory of BOLIVAR'S parents and wife.
10.30 a. m.: Removal to the National Pantheon of the remains of the eminent Dr. MIGUEL PEÑA and of the illustrious hero Gen. JACINTO LARA.

The following nations have been invited to participate in this great celebration by order of an Executive decree to that effect: Spain, the mother country, as a manifestation of filial affection; Bolivia, Colombia, Ecuador, and Peru, the sister republics liberated by BOLIVAR; Great Britain, in recognition of the assistance she rendered in the struggle for emancipation; the Argentine Republic and Brazil, as a token of gratitude for their friendly attitude in Venezuela's days of trial; the United States, as the first nation to recognize the independence of Venezuela; Haiti, for the support she gave the Venezuelans in the war of independence; and Mexico and Chile, to reciprocate the invitation which they sent to Venezuela to take part in their centennial celebrations.

# PROMINENT IN PAN AMERICAN AFFAIRS

AGAIN the BULLETIN takes much pleasure in publishing the portraits and biographical sketches of several individuals who, through long and active associations in Latin America, have become prominently identified with Pan American affairs. This list is particularly interesting, representing as it does men who have acquired position and popularity amongst people who were strangers to them at first. The BULLETIN always welcomes the opportunity to set forth in its columns such concrete examples of what can be accomplished in the development of better understanding, broader commercial possibilities, and general good feeling toward each other, by the interchange of officials, travelers, students, and leading business men. In its practical work for the promotion of commerce and comity, the Pan American Union has always regarded this interchange of representative men between the American Republics as of the highest importance.



(Photo by Harris-Ewing.)

SEÑOR DON JOSÉ RICHLING,
Consul General of Uruguay at New York City.

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SEÑOR DON JOSÉ RICHLING, CONSUL GENERAL OF URUGUAY IN NEW YORK CITY.

Prominent in the list of Latin Americans who are well known in Pan American circles is Señor Don JOSÉ RICHLING, the Consul Gen-

eral of the Republic of Uruguay at New York City. Many will recall with pleasure the able address of Señor RICHLING at the Pan American Commercial Conference, held under the auspices of the Pan American Union, February last. Señor RICHLING was born in Montevideo in 1874, and received his education in Europe. His natural inclinations and aptitudes led him to a course at the Commercial Academy of Hamburg, where he specialized in economics, finance, political science, and modern languages. On his return to Montevideo, Señor RICHLING engaged in the import and export business. In January, 1910, he entered the consular service of his country as Consul General in South Africa; later he was assigned to the important post at New York City, which two positions he now holds.



SEÑOR DON ARTURO L. FIALLO,
Consul General of the Dominican Republic at London.

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SEÑOR DON ARTURO L. FIALLO, CONSUL GENERAL OF THE DOMINICAN REPUBLIC AT LONDON.

In Señor Don ARTURO L. FIALLO is found another example of the Latin American finding favor and friendship in the United States. For many years Señor FIALLO represented his native country, the Dominican Republic, at Washington. First, as Secretary of the Dominican Legation, he acquired a host of friends in the private and official circles of the Nation's Capital, and later as Charge d'Affaires of the Dominican Government, he became its able diplomatic representative. From Washington, Señor FIALLO was called to Santo Domingo to assist in reorganizing the Department of State for Foreign Relations, a most important task, in which he rendered distinguished service. He also was prominently identified with the framing of the "Ley y Reglamento sobre Organización Diplomática," which was just issued last year. On the completion of

his work with the Government, Señor FIALLO was honored with the important post of Consul General to London, England, which position he now holds.

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DR. EUGENIO DAHNE AND DR. GASTAO NETTO DOS REYS, SPECIAL ENVOYS OF THE BRAZILIAN GOVERNMENT.

In previous issues of the BULLETIN, announcement has been made of the proposed visit to the United States of Dr. EUGENIO DAHNE and Dr. GASTAO NETTO DOS REYS, and also of their arrival in this country. These distinguished gentlemen, representing the Brazilian Government as special envoys, are here to assist in the promotion and organization of a direct steamship service between New Orleans and Brazil. Dr. DAHNE, who is designated as Commissioner General of the Brazilian Government to the United States and Canada, representing the Ministry of Agriculture, Industry and Commerce, and Dr. REYS, Special Envoy from the Minister of Agriculture, Industry and Commerce, are both very prominently identified with the official life of Brazil, and are to be commended on the spirit



DR. EUGENIO DAHNE,
Special Envoy of Brazilian Government.



DR. GASTAO NETTO DOS REYS,
Special Envoy of Brazilian Government.

of progress and friendship which has marked their activity in this country. While here the envoys have made visits to the larger commercial points and on their way east stopped at Washington. Here they were most cordially received by official and diplomatic representatives, and the Pan American Union was glad of the opportunity to welcome the visitors in its new home. It was a particular pleasure for the Director General to meet the envoys who are on a mission which is in direct line with the work and policy of this institution. The many complimentary luncheons and dinners arranged in honor of these gentlemen are indeed significant of the development of closer social and commercial relationship between the American Republics.



ALBERT W. BRICKWOOD, JR.,
United States Consul at Tapachula, Mexico.

ALBERT W. BRICKWOOD, JR., UNITED STATES CONSUL AT TAPACHULA, MEXICO.

ALBERT W. BRICKWOOD, Jr., the present incumbent of the consular post at Tapachula, Mexico, was born in Chicago, Ill., on October 14, 1879. He attended both public and high schools in his native city and graduated therefrom in 1897. Afterwards he studied civil and international law and in the year 1900 graduated from the Lewis Institute, affiliated with the University of Chicago. Mr. BRICKWOOD was then appointed census enumerator and Italian interpreter in Chicago. In 1901 he was employed by the Illinois Central Railroad as private secretary to the chairman of the board of pensions. Three years later he resigned to accept the position of secretary and commissary of the Chicago and Patagonia Copper and Gold Mining Co., at Nogales, Arizona. In 1905 he was appointed clerk in the American consulate at Nogales, State of Sonora, Mexico, and a few months later promoted to deputy consul of the same district. The following year he became vice consul in charge. In August, 1906, Mr. BRICKWOOD was made consul at Puerto Cortes, Honduras, from

which post he was transferred to Tapachula, State of Chiapas, Mexico, on May 31, 1909, when this consulate district was first established.

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CLAUDE I. DAWSON, UNITED STATES CONSUL AT PUERTO CORTES, HONDURAS.

Mr. Claude Ivan Dawson at one time connected with the staff of the Pan American Union, was born in Burlington, Iowa, October 23, 1877, but later removed to Anderson, S. C., which he now claims as his home. He received his elementary education in the graded schools of Washington, D. C. Graduating from the Eastern High School, Mr. Dawson spent one year at the Georgetown Law School. In 1899 he entered the Government service and for five years held various positions in the treasury department of the insular government of Porto Rico. In 1904 he severed his connections with the Government to accept the position of secretary of a prominent traction company in South Carolina. This position he held until 1908 when he again entered the service of the United States, this time as examiner with the Interstate Commerce Commission. Here he was employed for two years when, having successfully passed an examination, he was appointed United States Consul at Puerto Cortes, Honduras, of which post he is still the incumbent.



(Photo by Harris-Ewing.)

CLAUDE I. DAWSON,
United States Consul at Puerto Cortes, Honduras.

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FRANCIS BAILLIE PURDIE, PROMINENT BUSINESS MAN.

Mr. Purdie, who has returned to the United States from the management of the Buenos Aires branch of R. G. Dun & Co., has the distinction of being one of the best informed men in this country on the subject of commercial credits in South America. Born in Glasgow, Scotland, in 1859, he received his education and a legal

training in his native country. On his arrival in the United States, Mr. PURDIE entered the service of R. G. DUN & Co., with whom he has now been for over a quarter of a century. During this period he has very ably represented his concern in important pioneer work in Europe, Australia, South Africa, and also in Mexico. In 1902 Mr. PURDIE was delegated to Buenos Aires to establish an Argentine branch, and this he so successfully accomplished and managed that it has grown to be one of the leading agencies of this great commercial organization. While in South America, Mr. PURDIE extended his activities over a wide field of interests. He organized the North American Society of the River Plate and served as its president for a term; he has been an energetic member of the British and American Benevolent Society, the Progreso Club, and other associations. He also delivered the address of welcome on behalf of the North Americans in the River Plate on the occasion of Hon. ELIHU ROOT'S visit to South America. Mr. PURDIE has often been pleasantly referred to as "King of the American Colony." At the recent Pan American Commercial Conference, at Washington, he supplied some very important information on the subject of credits to the large number of delegates present.



(Photo by Harris-Ewing.)

FRANCIS BAILLIE PURDIE,

Prominent business man.

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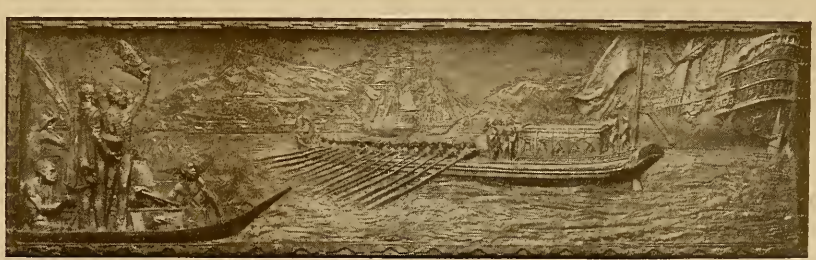
BRAINARD LORENZO HILL, INTRODUCER OF AMERICAN SHEEP IN THE RIVER PLATE, URUGUAY.

Among the Americans who have cast their lot with our neighbors to the south is BRAINARD LORENZO HILL. Born in Greene, N. Y., in 1834, he received his early education at the local public schools and at Oxford Academy. When only 19 years of age, Mr. HILL

was appointed general attorney and interventor of customs at the New York Exhibition of the Industries of all Nations. At the close of the exposition he removed to Uruguay, where he first acted as correspondent for various newspapers of the River Plate. Later he became engaged in some business adventures, his initial charge being the erection and management of the first large American flour mills in that country. At the termination of his contract he established himself in the sheep and cattle raising industry at San Jose. It was here that he introduced for the first time the best strains of New England stock to improve the flocks of the land. After 25 years on the "Estancia," he retired to become general manager of the Standard Life Assurance Co., at Montevideo. Twenty years with this company won him an honorable retirement, with a seat on the directorate. Mr. HILL successfully assisted the introduction into Uruguay of many American manufactures, while his thorough knowledge of conditions of Uruguay make his services sought for constantly by men in private as well as in official life. Mr. HILL had the distinction of representing Uruguay at the First Annual Meeting of the International Advisory Board of the Philadelphia Commercial Museum in 1907, served on the committee to entertain Hon. ELIHU ROOT during his trip to South America, and is a member of the leading clubs of Montevideo.



BRAINARD LORENZO HILL,
Introducer of American sheep in the River Plate, Uruguay.



# PAN AMERICA AT LAKE MOHONK CONFERENCE.

AS mentioned elsewhere in this issue, the Lake Mohonk Conference on International Arbitration opened its Seventeenth Annual Meeting on May 24. The evening of the opening day was devoted to the discussion of arbitration, and among the speakers were Minister CALDERÓN, of Bolivia; Baron D'ESTOURNELLES DE CONSTANT, Senator of France; Mr. F. J. YÁNES, Assistant Director of the Pan American Union; and the Hon. JOHN HICKS, ex-Minister to Peru and Chile. The BULLETIN takes pleasure in publishing below the speeches of Mr. CALDERÓN, the Bolivian Minister, and Mr. YÁNES.

ADDRESS OF SEÑOR DON IGNACIO CALDERÓN, MINISTER OF BOLIVIA.

It is a great pleasure for me to find myself once more in this Conference, and to be able to profit by the very interesting and instructive speeches—such as we have heard this morning from our distinguished chairman and the other gentlemen who have met here through the whole-hearted hospitality of our beloved host, Mr. SMILEY, to discuss the means of promoting and developing international arbitration.

I am afraid everything that could be said on the subject has already been said very well and eloquently here and elsewhere; therefore, if the summary remarks that I will make are lacking of originality they will at least be the expression of my sincere convictions as to the position and the influence of the United States in the peace movement of the world.

When we look back into history it is not astonishing that there are so many people who seem to think it foolish to pretend to substitute arbitration for war. The Greeks were the most idealistic, artistic, and civilized nation of the olden times, and still they kept warring constantly among themselves and with their Asiatic enemies. The Romans based their power in their military strength, and they conquered almost every region of the then known world, and when that wonderful organization went to pieces, Europe was invaded by hordes of barbarians, who plunged it into a night of misery and destruction. For a moment it looked as if civilization had been forever banished from the world; the robber barons and the iron-clad knights set up their moated castles everywhere and submitted to serfdom the unhappy inhabitants of the country. Force and the sword were the only power dominating the world. Through the civilizing influence of Christianity and by the combined action of the people with the kings against the feudal lords in the continent, and the people and the lords against the kings in England, feudality gave away to the modern monarchies. But the kings thought themselves the representatives of God on earth, had themselves anointed; and to satisfy their ambition and their pride kept their countries in war, taking it at times as an amusement.

The chronicles of those days tell us the king went to war as a hunter goes after game; even the religious sentiments of the people were made an object of bloody and long-continued wars that lasted for many decades.

It was under those conditions that a group of noble-hearted men started in the *Mayflower* for the new world, guided by the highest ideals and bringing with them the seeds of justice, peace, and freedom to the new world; and out of that grew the greatest commonwealth that has ever existed in the world. The English colonies of this part of the Continent grew in an atmosphere of popular self-government, accustomed to law and order; but when the time came, in the words of the Declaration of Independence, for them to assume among the powers of the world that independent position and equal situation among the powers of the world to which they were entitled by the laws of nature, they severed their allegiance with the mother country and established the United States of America. The advanced political principles of the illustrious patriots that framed that admirable code of political wisdom called the Constitution of the United States found its most faithful exponent in the great and spotless character whom the poet called the Cincinnatus of the West and his grateful fellow citizens acclaimed "first in peace, first in war, and first in the hearts of his countrymen."

GEORGE WASHINGTON, by his heroic devotion to duty, his uniform respect for right and justice, his love of peace, and his kind sympathy for mankind, has pointed out in a most clear way the future policy of his country, not only in its internal affairs, but in its international relations. The advent of the United States into the community of the nations marks an era of new development in the political as well as the economic condition of the world.

Attracted by the freedom and equality enjoyed in this country under its democratic institutions, millions of men came here seeking to improve their condition and to find that happiness after which we all are striving. The Celt and the Saxon; the German and the Scandinavian; the Russian and the Slav; the Jew and the Gentile—the men of every nationality and creed came here to help in the great work of developing the wonderful and abundant resources of *God's country*. About nine thousand million dollars represented last year only in agricultural products the result of their peaceful work. Forgetting their historic and racial hatreds, they became molded here in one glorious American citizenship.

One of the first steps in the international policy of this country was the famous declaration that there was not an inch of territory in the American continent subject to conquest and that the independence acquired by the former Spanish colonies was to be respected, thus consecrating the whole Western Hemisphere to peace and democracy.

The Latin American Republics were in full accord with this continental policy, and BOLIVAR, the liberator of South America, was the first to call a Pan American Congress to Panama in 1825, to which the United States was invited. After that several other international congresses have taken place in South America to discuss the means of promoting their common welfare. When the French invaded Mexico, Spain, following a prearranged plan, sent to the Pacific a fleet for the purpose of reconquering the old colonies; the Republics of the west coast formed an alliance to defend themselves, and the Spanish fleet met with a crushing defeat before the walls of Callao, in Peru, and went back to the Philippines, never to return on such an errand.

Among the innumerable inventions with which the American ingenuity has endowed the world, there are some that have done more than any other thing for peace, for the enlarging the community of interests and bringing the nations of the world to realize the solidarity of their destinies. I speak of the application of steam and electricity to transportation and communication. When people of the most distant points came in quick and close contact, when distances almost disappeared, and communication became instantaneous, they wondered why there was any occasion for mistrust and why they did not cultivate more friendly relations amongst themselves. They understood that there was no occasion whatever for their not helping each other in the great work of developing their welfare by a common effort.

I shall not dwell upon the influence of the United States in regard to the Hague Conference. You know it was owing to the United States that the tribunal organized by the first Hague Conference was made active by submitting to it the first question to be arbitrated. Later, several other important cases have been submitted to the same tribunal. It was through the influence of the United States that all the Republics of this Continent were called to form part of this second Hague Conference. The most important decision taken at that Conference was through the initiative of the United States delegation. I refer to the establishment of the principle of compulsory arbitration before enforcing any pecuniary claims. This decision has not only been a great step toward peace, but has put an end to the most shameful abuses of force—in favor of unscrupulous speculators who, in the hope of being backed by the whole power of their countries, started in most cases false claims to enrich themselves at the expense of weaker countries whose peace they contributed to disturb in order to get irrational concessions.

The United States at this moment is engaged in a work of international significance—the Panama Canal. This is a work of peace, although there are some who look at it only as a strategic work, in order to facilitate war movements against imaginary enemies. Such a sentiment belittles not only the high aims of a great country, but one of the greatest financial efforts and feats of engineering skill of the age. The Panama Canal, that will put whole continents near each other, will be, when opened, the great highway through which all the nations of the world, from the East and the West, the North and the South, will meet together in a great work of peace, of commerce and of civilization.

Ladies and gentlemen, it is a great satisfaction to think that the movement for arbitration in which these conferences have had great part is no more a question, but an accomplished fact. The problem now is how to organize a tribunal, so composed of men not only high in moral character, impartial, but well versed in law, jurisprudence, and the international rights, that their awards will be accepted without doubt by mankind in general—a tribunal that will have such moral power as the Supreme Court of the United States has in this country. The President of the United States has taken one of the greatest steps toward the final development of arbitration when he called two of the most enlightened and liberal countries of the world to sign a treaty absolutely without exceptions, because justice has no exceptions. The United States is not afraid to submit any question to the decision of a just and proper tribunal, recognizing that its power is based in right and not in might. The great enthusiasm with which this proposal has been received through all the nations is most encouraging. Without the moral support of public opinion such initiative would scarcely be but the expression of a great and noble heart. If the treaty for absolute arbitration is signed by the United States, England, and France, undoubtedly it will be signed by other powers, and even if that should not be the case I doubt if any nation, no matter how strong, would dare to defy public opinion—the public opinion of the world—and go to war before submitting its claims to arbitration.

Those few individuals who think that the mission of the United States is to go after the lure of gold and the call of ambition are not only too mean to understand the high ideals of a democracy, but are false to the traditions of their forefathers and the founders of this great Nation. As in the infinite space millions of suns and stars since the day of creation revolve in their respective spheres without clashing, obeying the eternal law of gravitation, so the nations of the world, as civilization grows and increases, are called in their several spheres to develop their resources and help one another in the common work of uplifting mankind, making a better and a happier world, and establishing that reign of peace, justice, and charity which, after all, is the best and most fitting preparation for a nobler and everlasting life after our brief passage through this world.

ADDRESS OF FRANCISCO J. YÁNES, ASSISTANT DIRECTOR OF THE PAN AMERICAN UNION.

Mr. CHAIRMAN, Mr. SMILEY, LADIES AND GENTLEMEN: In response to the kind invitation of Mr. SMILEY I have come here representing the Pan American Union, an institution that stands for peace, good will, friendship, and better understanding among its 21 constituent Republics, 20 of which are of Latin origin, in the accepted sense expressing the descendants of the Spanish, Portuguese, and French in America. The Pan American Union, formerly known as the International Bureau of American Republics, was created by the farsightedness of the States that attended the First Pan American Conference which met in Washington about 20 years ago, at the invitation of JAMES G. BLAINE, then Secretary of State.

The work of the Pan American Union, because of its very character as an official international institution, deserves to rank among the loftiest efforts made by man to better the condition of mankind. It represents the crystallization of a noble ideal, well worthy the cooperation of such men as President TAFT, the man of peace; Secretary of State KNOX, our chairman, the advocate of arbitration; Senator ELIHU ROOT, the missionary of Pan Americanism; ANDREW CARNEGIE, the benefactor of humanity, and the entire Latin-American Diplomatic Corps accredited to Washington, members of our Governing Board, one of whom, the Minister of Bolivia, a scholar of rare discernment and breadth of mind, is here with us, and last, but not least, Director General JOHN BARRETT, the standard bearer in the great Pan American movement, an American citizen by birth, a Pan American citizen by common consent.

The subject of arbitration in Latin-America, upon which I have been invited to address you, has been discussed at these conferences at various times by scholars and diplomats, well qualified by their learning and experience to enlighten the world on this important topic. This very morning Mr. SMILEY, in his opening address, made a review of our efforts in Latin-America for the progress of arbitration.

Pan Americanism and arbitration go hand in hand. Ever since the establishment of the Latin-American countries as free, sovereign States arbitration has been urged and adopted in the settlement of their international disputes. As the Minister of Bolivia just said, SIMÓN BOLÍVAR, a Venezuelan, called the WASHINGTON of South America, as farsighted and keen a statesman as he was a military genius, was the originator of the idea of holding the first congress of nations of America in Panama in 1826, for the purpose, among other measures, of adopting arbitration as a principle of American international policy. The Latin-American countries attending the Congress of Panama—that is, Colombia, Central America, Mexico, and Peru—signed a treaty of union, providing among other things the amicable compromise between themselves of differences then existing or which might arise in the future.

Arbitration, as can be seen, is not new with us Latin-Americans, who have as the foundation of our social structure the civil law of Rome, which provides for arbitration as one of the ordinary and usual means of settling differences between man and man. I am aware that the courts in England and in the United States take cognizance of and enforce arbitral awards in matters of dispute between private citizens, but I understand that this method of settling disputes has never been current under the common law of England, and is more or less of an exotic, grafted from the civil law. Not so with us Latin-Americans, as this is an ordinary process, well recognized and much used, so that from our familiarity with the idea its extension to the larger sphere of disputes between nations was a natural and logical outcome.

From the beginning of our war for independence, about 100 years ago, there are many instances of national differences settled by methods which were more or less in the nature of arbitration. In direct negotiation it has happened on several occasions that particular facts have been submitted to learned societies or individuals for arbitration, and upon such findings a basis has been established in many cases for amicable settlements of what might otherwise have ended in serious difficulties. In more

recent years arbitration and direct negotiations partaking often of the nature of arbitral commissions have been resorted to in the Latin-American countries, I venture to say, more frequently than in all the rest of the world put together, and the results of this arbitration have been more weighty many times over than arbitration elsewhere resorted to.

Let us take one subject alone, the subject of boundary disputes—the worship of the old Latin god Terminus. Let us briefly compare Europe and the Latin-American countries in this connection. The map of Europe at about the middle of the nineteenth century, say 60 years ago, is not the map of Europe to-day. If we except the Iberian and the Scandinavian peninsulas and the British Islands, there is scarcely a country in central, western, southern, or southeastern Europe which is to-day recognizable. The Kingdom of the two Sicilies, the States of the Church, the Italian Duchies, and the Austrian possessions in northern Italy, have been wiped out, and the Kingdom of Sardinia has developed into the Kingdom of Italy. Austria, the heir of the holy Roman Empire, has been to a large extent pushed out of Germany and, joined with Hungary, has spread to the south and east. France no longer extends to the Rhine. Nearly one-half of Denmark, the Duchies, is now under the German flag. Bulgaria and Roumania have emerged from the shadow of the Crescent. Servia has changed her boundaries. And, greatest of all, Prussia, the Kingdom of Saxony, the Saxon Duchies, Wurttemberg, Bavaria, Hanover, and the dozens of small states occupying all the north center of Europe have joined together to make the great German Empire.

Europe has been remade; but these great changes were not the result of negotiations, except in a few isolated cases. It was war, bloody and costly war, which remodeled and remade Europe. The Crimean War, the Italian Wars, the Hungarian War, the Danish War, the Austro-Prussian War, were all fought for territory, to settle boundaries. The Franco-Prussian War, although it had not on its face this purpose, yet resulted in a large accession of territory ceded by France to Germany.

Look at the Latin-American countries, on the other hand. Compare the map of the same period, 60 years ago, with the map of to-day. The picture made by the one is almost identical with the picture made by the other. With one or two exceptions, all the changes in the map of the Latin-American countries are due to the increased geographical knowledge of the interior of the country. The Latin-American countries, like the United States and Canada, were first settled along the seacoast. The great interior was more or less unknown, and it naturally followed that territorial divisions were more or less shifting and indeterminate. Final settlement of frontiers were not really changes, but more or less accurate locations of what before was undetermined. With the possible exception of the dispute for territory between the Portuguese Empire of Brazil and the Spanish Argentine Republic, out of which dispute grew the Republic of Uruguay, there has been in Latin America no war for territory. The only two great wars of South America have been the Paraguayan War and the Peru-Bolivia-Chilean War. The first was not fought for territory, nor can it be justly claimed that the second was, though the result of the war, as in the case of the Franco-Prussian War, was that Chile acquired territorial accessions in the nature of an indemnity.

The Republics of Latin America are the old Spanish, Portuguese, and French viceroyalties, audiencias, and provinces, as far as they were determined. Not one of them claims one foot of territory except as derived by inheritance from the old Spanish colonial divisions, necessarily more or less undetermined. But let us see what arbitration and direct negotiations, in most cases amounting to arbitration, have done to settle these boundaries.

Mexico has settled all its boundaries by arbitration. So, for the most part, have the Central American Republics, the dispute between Panama and Costa Rica being in the nature of exact determination of the meaning of an arbitral award. The bounda-

ries between Colombia and Venezuela have been settled by arbitration, and what differences remain will soon be disposed of by direct negotiations. The boundaries of Colombia with Peru, Brazil, and Ecuador have either been settled by arbitration or are in process of settlement. All of the boundaries of Brazil except as mentioned, and including those with Uruguay, Paraguay, Bolivia, Venezuela, and the Guianas have been amicably settled. Bolivia, the country next to Brazil, inheriting the greatest boundary difficulties, has settled every one of them. Argentina and Chile have come to an agreement involving very difficult principles of law. There are to-day two important boundary questions in process of discussion, that of Ecuador and Peru and that of the Dominican Republic and Haiti. Both questions, it is hoped, will soon be submitted to arbitration, following the example of the other Latin-American sisters and neighbors.

It would be impossible to conceive of a situation so abounding in danger and so liable to lead to war as the Latin-American boundary situation of 100 years ago. Almost every boundary was then undetermined for natural and historical causes, but yet, quietly and peacefully, without war, without bloodshed, these boundaries have for the most part been settled amicably, and in the spirit of modern progress, not under the reign of Terminus, but of the CHRIST OF PEACE that crowns the Andes.

Could there be found a better, a nobler example of allegiance to a principle than the erection of a statue of CHRIST on the loftiest peaks of the Andes, on the boundary line between Argentina and Chile, as a pledge of brotherly love, as an eternal monument to arbitration? There at Uspallata, at an altitude of 16,000 feet, there stands with outstretched arms, peace in His noble features, the Lover of Mankind, CHRIST THE REDEEMER, cast in bronze from the cannon of two sister Republics which averted war over a territorial dispute by recourse to arbitration.

The number of cases submitted to arbitration by formal agreement to which American nations were parties, from 1794 to 1910, amounts to 180, according to JOHN BARRETT in his work "The Pan American Union, Peace, Friendship, Commerce" (Washington, D. C., 1911). The same authority gives also a list of 36 treaties applying exclusively to boundary or territorial claims, entered into by the Pan American countries from 1857 to 1910. The number of treaties containing arbitration clauses, to which the American Republics have been parties, is 140, and the list of general arbitration treaties concluded by our countries since the first Hague Conference numbers 40.

Where in all the world can the same be said? Have we not a right, then, to claim that we of Latin America are the leaders, the pioneers, and the principal adherents of this doctrine of arbitration, which seems to most of the world a new, strange, and untried doctrine? To us it is old, well tried, well known, well loved, and inground in our legal, our social, our educational institutions, and in fact is a part of our very nature.



# BOOK NOTES

"**The Argentine in the Twentieth Century.**" By Albert B. Martinez and Maurice Lewandowski. London, T. Fisher Unwin. 1911. Map. 376 p. Size 5¾ by 9 inches. *Price 12s. 6d.*

Things move so rapidly in Argentina that although this volume is dated 1911, and is presumably the last word on conditions there, still figures recently received in this office show that there was no halt in the onward progress of the people of Argentina when this book left the printers' hands.



NATIONAL THEATER IN COURSE OF CONSTRUCTION AT MEXICO CITY.

This massive and ornate building is one of the most beautiful structures in the world. It is constructed entirely of white marble, is situated in the Alameda, and covers an area of five acres. Among the strikingly novel features of this edifice is a spacious winter garden, separating the auditorium from the ballroom, with a warm Italian setting of lawns, shrubbery, flowers, and fountains interspersed with pergolas and richly sculptured groups. The seating capacity of the theater is about 3,000, and over $8,000,000 will have been expended upon this work of art before it is complete.

Perhaps in a way a semiofficial publication, yet the story of Argentine development is treated of so impartially that the reader instinctively feels he is getting facts that can be relied upon.

An enlightening preface by Monsieur Émile Levasseur is followed by a masterly introduction by the late Señor Don Ch. Pellegrini, former President of the Argentine Republic, in which the writer gives a brief but comprehensive summary of the events that have left their impress upon Latin American civilization as we find it to-day.

There is a comparison with the same relative period of North American history, which is not based on correct premises, however. The early settlers of the 13 colonies were little more homogeneous than the first colonizers of Peru and Argentina

Beginning with a brief sketch of the physical characteristics of the country, the authors take up to analyze in sequence the development in railways, immigration and colonization, agriculture, stock raising, land values (a most important chapter), then pass to a consideration of the Argentine Republic from a commercial and industrial point of view, which heading includes foreign trade, industries, mines, banks, concluding with several very replete chapters dealing with the subject of Argentine finance. The discussion of the evils of double currency is worth careful study, while the heritage of financial instability that found its corrective in the establishment of the Bank of Conversion is given a lucid exposition.

To conclude, the book gives just that character of economic information so difficult of compilation and so seldom treated of impartially. The volume is a distinct addition to the Columbus Memorial Library.

We tender Señor MARTINEZ and Dr. LEWANDOWSKI our sincere congratulations on the success of their efforts.

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**"Argentine and Her People of To-day."** By NEVIN O. WINTER. Boston, L.C. Page & Co. 1911. Plates. Folding map. 421 p. Size 5½ by 8 inches. *Price $3.*

Mr. Winter has been making a serious first-hand study of the Latin-American countries and four very informative books are the result of his labors.

His travels in Mexico, Guatemala, and Brazil have been described in previous volumes, but we do not hesitate to say that his book on Argentina, although uniform with the others, shows a much deeper insight into motives that underlie the Spanish-American character, and a more becoming tolerance of judgment, due undoubtedly to a larger intimate acquaintance with the social side of the Latin American, and a keener appreciation of his amiable nature.

The book gives just that class of information that should interest the general reader, but more especially the traveler for pleasure. It will be found a boon indeed by all those argonauts who yearly sail on the South American excursions.

The description of life and customs are intimate, while the analogy with the people of the United States contains an implied compliment rarely given by an American.

Altogether it is a book to be recommended to anyone wishing a good general knowledge of the conditions of life in Argentina without the effort of "heavy" reading or the deciphering of complicated statistics. It is a well-made volume, clearly printed, furnished with good photographs, and similar in appearance to books previously written by this author.

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**"Across South America."** By HIRAM BINGHAM. Boston and New York, HOUGHTON MIFFLIN Co. 1911. Plates. 405 p. Size 5½ by 8½ inches. *Price $3.50.*

When Prof. BINGHAM, of Yale University, was appointed delegate to the First Pan American Scientific Congress to be held in Santiago, Chile, he did not attempt to reach his destination over the most convenient and quickest route, namely across Panama and down the west coast. No, instead of the lazy embrace of the steamer chair, with a vista of a sparkling sea and a mountain-crowned shore line, he chose the discomforts of railway travel, the back of mule and a route made interesting by the incidental adventures that are ever the lot of pioneer voyagers. This book is the annals of his journey.

At the outset we must record our disappointment that an author with Prof. BINGHAM'S appreciation of the Latin character, an appreciation evidenced by sympathetic consideration in a previous work, should dwell so often upon the foibles of our South American neighbors. Humor of this type is seldom relished, even by the people of the United States (*vide* newspapers on DICKENS and KIPLING).

The author, as so many before him, fell under the charm of the beautiful bay of Rio de Janeiro and describes in well chosen phrases this unique harbor.

A chapter is devoted to Buenos Aires, and then after a short side journey into the historical realm the writer gets off across South America, and when we remember that this was much the same road over which toiled the caravans of the Viceroys, carrying the toll of Potosi, our interest quickens.

The trip from Buenos Aires to La Quiaca, on the Bolivian frontier, is made by train, a strong recommendation of Argentine Railroad enterprise.

From here our travelers continued to Potosi by mule and stage, and the author gives us an excellent chapter on this fascinating old city. Sucre, the de jure capital of Bolivia, and Oruro, were visited before the delegates pushed on to Santiago, where the Pan American Scientific Congress was to be held.



(Tiffany Studios, New York.)

MOSAIC CURTAIN OF MEXICAN NATIONAL THEATER.

This curtain, which has attracted such wide notice, is conceived in the spirit of the old Mexican legend of the two lovers who, disobedient to the mandates of the princess's father, were turned into great volcanoes. The scene depicts the icy summits of the volcano revealing the prone form of Princess Ixtaccihuatl, cold and impassive, while opposite rises the glowing vapor from the consuming fire that burns in the breast of Prince Popocatepetl. The minutest details in the picture are wrought with extreme deftness, while the brilliant color scheme finds its expression in the opalescence and iridescence of the million separate pieces of favrile glass which enter into its construction. The curtain contains over 2,500 square feet of glass mosaic and weighs 27 tons. It will be operated by hydraulic pressure, and the time required to raise or lower it, seven seconds. The glass curtain, together with its bronze framework, represent over 15 months of continuous work at the factories of the Tiffany Studios, New York, and under the personal supervision of Mr. Louis C. Tiffany.

The author gratefully records the unfailing kindness and courtesy of the Chileans. While the volume is an interesting record of the incidents of travel with the impressions of the author, it is not until Prof. BINGHAM describes the expedition to Choqquequirau that we get new data of distinct interest. Although these ruins have been known to archeologists for some time, however, we have little reliable information in regard to them, so Professor BINGHAM'S maps, pictures and text, are the more interesting and valuable. Dr. MAX UHLE contemplates an extended investigation of the same region.

The kindly treatment afforded our travelers in this land is more in accordance with the traditional hospitality of the people of Latin America and deserves a more considerate style in writing of it.

While the author avers to frank criticism, to offset the unstinted praise of official propaganda (*sic*), still he lays himself open to the charge of hypercriticism. Besides there are those who doubt that the United States shelters all the perfections.

Prof. BINGHAM is about to lead another expedition into unexplored Peru, and we fear that his intentions as thus expressed may receive an unfortunate interpretation by our Latin American friends.

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**L'Uruguay au Commencement du XX^e^ Siècle (Uruguay at the Beginning of the XXth Century,** by VIRGILIO SAMPOGNARO, secretary of the Uruguayan Legation at The Hague. 396 pages, illustrated panoramic view of Montevideo and railroad map of the Republic. L. J. C. BOUCHER, The Hague, 1910.

So little is known of Uruguay, comparatively speaking, that this book, published under the auspices of the Committee on Official Participations of the Republic of



(Tiffany Studios, New York.)

SCULPTURED GROUP OVER THE MAIN ENTRANCE TO THE NATIONAL THEATER OF MEXICO.

Elaborately sculptured group, executed in alto relievo, the work of Leonardo Bistolfi, one of the most celebrated sculptors of Italy.

Uruguay at the Brussels Exposition, and written in French, which is in itself a telling point in its favor as most of the works on this country have been in Spanish, thereby restricting their circulation to Spanish-speaking countries, amply fulfills the purpose for which it was written, or, in the words of the author, "To make better known in Europe a new people; a nation which on the other side of the ocean has in the last dozen years progressed in a manner worthy of attracting attention."

This book, which is well illustrated, is of more than usual interest to those desirous of extending their acquaintance with this rich and progressive Republic, and particularly to the farmer and workingman contemplating emigrating to this new land to establish a home, as one chapter under the title "The working class" gives the minutest information in regard to the occupations, salaries, hours of work of laborers, and also as to the cost of provisions, rents, etc. The author is to be congratulated on the timeliness of his book and the wealth of interesting and useful information it contains.

**Panama, the Isthmus and the Canal.** FORBES LINDSAY. Revised edition with new illustrations. Philadelphia, THE JOHN C. WINSTON CO., 1911. Pp. 389. *Price, $1.*

Mr. LINDSAY speaks from a long and intimate experience in Panama, and consequently his statements can be taken as correct and his opinions trustworthy. In fact, this is unquestionably the best untechnical authority on the canal, as it has been written not for the skilled engineer but for the lay reader who wishes to know what has been accomplished on the Isthmus, what the present conditions are, and what purpose the waterway will subserve in the future. The history of the country is succinctly given, the imaginative efforts to cut a passage from ocean to ocean are told, and chapters are devoted to the Panama Railroad, to the French company, to the American negotiations, and the recent progress of the canal itself. An appendix contains two new chapters, one on "Great canals of the world," and the other on the "Last stage of the Panama Canal," bringing the subject down to the date of the book's appearance. This last chapter is unfortunately necessary, as it might have better been introduced into the body of the book and incorporated with the text, so as to make the narrative continuous. As it is, the book shows that it is largely a reprint of an earlier edition, and contains not a few paragraphs the sense of which is misleading or at the least confusing, while it could all have been clarified by changing a few present tenses into past tenses, so as to give the proper chronological perspective. The same criticism holds concerning the photograph of "President" AMADOR, who, as should be stated, is dead, and has been superseded by another elected President. Omitting such evidences of forgetfulness, however, and they do not affect the substantial value of the work, this book on Panama is the best source of information, in a small compass, which a student can consult.

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**The New International Year Book.** A compendium of the world's progress for the year 1910. Editor, FRANK MOORE COLBY, M. A.; Associate Editor, ALLEN LEON CHURCHILL. New York, DODD, MEAD & CO., 1911. 837 pp. Illus. maps. Size, $9\frac{3}{4}$ by 7. *Price, $5.*

This volume can well be called a record of the world's advancement for the year. Its scope includes the latest development in agriculture to the newest discoveries in astronomy, and the year's changes in the sciences from philology to zoology. A really necessary work for one who wishes to have up-to-date information in a convenient form. We regret, however, to see that through possibly hasty proof reading the Christian name of the present Secretary of the Navy is given as John when it should be GEORGE VON L. MEYER.

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**Papers on the Southern Spanish Colonies of America.** By BERNARD MOSES. Berkeley, The University Press, 1911. 153 pp. Size, 9 by 6.

This short volume is a collection of papers that had already appeared in the University of California Chronicle. They may be said to contain studies of the different phases of Latin-American history from a popular point of view, and give an insight into colonial conditions in the South American Republics described in the colloquial language of to-day. It is easy reading and valuable to the student of South American history.

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**Register of Porto Rico for 1910.** Prepared and compiled under the direction of Hon. M. DREW CARREL, Secretary of Porto Rico. October, 1910. San Juan, P. R., Bureau of Supplies, Printing, and Transportation, 1911. 328 pp. Illus. maps. Size, 9 by 6.

A Government publication which gives just that sort of information on Porto Rico that should interest the American citizen from the broad point of view of citizenship, or more especially if he has plans of emigrating to this fertile island of delightful climate. It is perhaps the best book in English giving data on Porto Rico that has been received in the Columbus Memorial Library to date.

**International Mining Manual, 1911. Embracing the principal operating metal mines, mills, smelting, and refining plants of the United States, Mexico, Canada, and coal mines of the Western States, Mexico, and Canada.** ALEXANDER R. DUNBAR, Editor. Western Mining Directory Co., publishers. Denver, Colo. 307 pp.

The Columbus Memorial Library acknowledges, with thanks, the copy of this valuable mining directory.

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**Trade Development in Latin America. Department of Commerce and Labor, Bureau of Manufactures, Special Agents Series, No. 45.** 1911. 56 pp.

A report by JOHN M. TURNER, the well-known commercial agent who has recently made a tour of all South America under the direction of the Department of Commerce and Labor, and gives his conclusions concerning this territory as a trade field. Mr. TURNER's pamphlet should be obtained by all merchants who contemplate doing business in Latin America.

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**Cacao, its Cultivation and Curing.** J. HINCHLEY HART. Pp. 307, 8vo. London, 1911. Duckworth & Co. Price 7/6, net.

The author, who unfortunately died just before his book was finished, was for years superintendent of the royal botanic gardens in Trinidad, and his experience with cacao had been so extensive as to make him an acknowledged authority the world over on the topic to which his life had been devoted. This book may therefore be taken as the last word up to the present on an American product which has come more and more into prominence in international markets. Cacao is preferred by the author to cocoa, in speaking of the plant and its derivatives, although he would not displace the popular English word cocoa to designate the drink itself. The contents of the volume carries through the botany of cacao, the selection of the land, planting, manuring, diseases, and marketing, and embraces every conceivable phase of the life connected with the cacao planter. As the demand for cocoa and chocolate is increasing rapidly, and as much encouragement is given to extend the area of trees, this work is welcomed as a thoroughly trustworthy handbook on one of the great agricultural industries of tropical America.



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**México al dia.** Impresiones y notas de viaje. By ADOLFO DOLLERO. Pp. 972, 8vo. Libreria de la Viuda de C. Bouret, Paris and Mexico, 1911.

This is a substantial book by a well-known French writer, who traveled extensively throughout the Republic of Mexico for three years (1907 to 1910), and then gave his "impressions," as he calls them, to the reading public. Interwoven with descriptions of the places and peoples visited, which include practically every known region of the Republic, are numerous paragraphs of statistics, considerable historical data to illustrate the changes that have taken place, and also a charming personal narrative of his own experiences confirming those of many other travelers about the hospitality and generosity of the people. A rather unusual but certainly a serviceable section (pt. 2) is given to a commercial index, abridged, of most of the larger towns in Mexico. An advertisement states that editions in English, French, Italian, and German are to appear, as well as this in Spanish, and certainly for the student wishing to obtain a

modern European's ideas of a progressive American country, nothing better can be advised than *Mexico al dia*.

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**Compendio de la Historia de México.** Para uso de los colegios de instruccion superior de la Republica. Por el Liccenciado Luis Perez Verdia. (Fifth edition, revised and illustrated.) Pp. 558, 8vo. Librer$^{a}$a de la Vda. de C. Bouret, Paris and Mexico, 1911.

The scope of this history of Mexico is from earliest times, with conservative speculation on the origin of the native races of the country, to the end of the nineteenth century. The greater portion of the book, there being four parts in all, is given to the earlier years of Mexico, with extensive chapters on the Spanish invasion. Verdia manifests an unusual individuality in judgment on the topic because he admits of no excuse for the conquest of the country, and declares an opinion of Cortes which is by no means the commonly accepted one of ordinary history. In fact, the book in earlier editions has on that account aroused criticism both in Spain and in France. That it is a permanent contribution to the historical literature of America can not be doubted.

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**"Lands of the Southern Cross. A Visit to South America."** By Rev. Charles Warren Currier, Ph. D.A Washington, D. C., Spanish-American Publication Society. 1911. Plates. 401 p. Size 5½ by 8 inches. *Price, $1.50.*

In the record of his journey, Father Currier has given us a book containing data that it is not usual to find in a volume of travels. The education and calling of the author naturally lead him to a discussion of the conditions in South America from what might be called a semi religious point of view. Doctor Currier, however, is in no way intolerant and shows himself essentially fair in describing the results of the Protestant missionary movements, as well as the influence of the Catholic Church upon Latin American civilization.

The author, who has written most authoritatively upon literary matters in South America, brings out interesting details anent the culture of the Latin American along artistic lines. Many of the details incident to travel are accurately described, and thus the volume is of distinct practical value to any one inspiring to follow in the footsteps of the author.

The statistics and general information are cleverly interwoven with the text, and the author concludes with the record of a delightful cruise throughout the West Indies.

The Columbus Memorial Library acknowledges with thanks the receipt of this book, which contains new matter on South America, put before the reader in strong and clear English.

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**The American Society of Tropical Medicine.** Vol. 5, 1910. A generous book of 400 pages, devoted to special papers on diseases peculiar to the Tropics.

Most of the work is technical and therefore of interest only to those making a professional study of that subject, but one rather extensive article is of such great value that it should receive wider publicity. This is a series of four lectures on tropical diseases in general, including insects and parasites, how these can be studied by the person in the temperate zone, and the health problems for Caucasians in tropical residence. To read literature of this kind ought to be one of the weapons of preparation for any person whose affairs call him into the Tropics.

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**The wirtschaftliche Bedeutung Argentiniens** (The Economical Significance of the Argentine Republic). An address by Director Leopold before the Austrian Chamber of Commerce, April 29, 1910.

To readers of the Monthly Bulletin the subject matter of this lecture is not new, as it gives in detail or in general the trade figures and others of Argentina, which have

so attracted attention to that energetic country. The interesting point is that in the lecture Austrians are urged to bestir themselves, to recognize the tremendous importance of South America in the world's commerce, and to offer fair competition with other countries in these profitable markets, or otherwise they will lose and others will gain.

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**Monografías Departamentales.** Statistical monographs dealing with geography, political subdivisions, municipal conditions and corresponding data, one for each Department of the Republic of El Salvador.

The Republic has 14 Departments (corresponding somewhat to States), and of these 7 have so far received monographs with details of the above character. They are published under the editorial control of Dr. SANTIAGO I. BARBERENA, the Director General of the Statistical Bureau of the Republic. When the remaining 7 are issued they will together form a practical descriptive statistical index of the country. A too complimentary notice of these monographs can hardly be given in the BULLETIN when their practical value is considered, for they place before the student, in such succinct and concise form, the facts and relative knowledge required by him, that they might well serve, by the addition of maps and more complete historical paragraphs, as a handbook of the Republic. Although they appear in Spanish at present, and are therefore not available for the reader unacquainted with that language, they are nevertheless of great service to those who work continuously in the Columbus Memorial Library of the Pan American Union, and it is certain that they will be of inestimable service when a handbook of Salvador comes to be compiled.



# LATIN AMERICA IN THE MAGAZINES

"**Further Explorations in Bolivia: The River Heath,**" by Maj. P. H. Fawcett, R. A., in the April number of The Geographical Journal.

The work done by Maj. Fawcett, as head of the Bolivian commission charged with determining the exact boundary between Peru and Bolivia, is perhaps the most important of its character, and his recent expedition the most hazardous undertaken by any explorer of late years.

Central equatorial South America is classed by pioneers who have had large experience in the world's other hidden places from the Yukon to Tibet as the most difficult, dangerous, and unhealthy section of the earth's surface to explore. Indians, venomous insects, deadly reptiles that thrive in a dank miasmic atmosphere of almost continual rainfall, combined with an impenetrable jungle or rank vegetation and enormous trees that rise 200 feet from the swampy soil, spreading at the top into luxuriant foliage that makes the region one of almost perpetual night, are the conditions that prevail.



DR. EDWIN R. HEATH.

The histories of the earlier expeditions are little more than tales of disaster and massacre or marvelous escapes of gaunt fever-racked survivors who have reached civilization only after having undergone the most untoward sufferings.

That Maj. Fawcett has made two successful explorations in this country speaks strongly for his undaunted courage, great ability, and unfailing tact, this last quality enabling him to avoid trouble with the Indians after one nerve-testing encounter.

The English officer's work was carried on in the Caupolican territory, which includes the country east of the Andes in a triangle formed with the Madre de Dios (Amaru-Maya) and Beni Rivers. This country is inhabited by numerous wild tribes that are seldom seen yet haunt the jungle like shadows to make their presence felt by a fatal flight of arrows. Of these the Guarayas are the most powerful and most feared.

We take this opportunity of putting Maj. Fawcett right in the matter of the name of the River Heath. He erroneously stated that it was so named from an English explorer who was killed there by the savages.

Dr. E. R. HEATH is an American and is alive and well to-day, living in Kansas City, Kansas. We have been in correspondence with him within the year on matters dealing with the early attempts of building the Madeira-Mamore Railroad, he having been medical officer with Col. CHURCH'S famous expedition. He descended the Beni to its mouth in 1881 and then turned back to reascend this never previously explored river to its source coming out at La Paz. (See Proceedings of the Royal Geographic Society. June 1883, vol. 5, new series, pp. 327–347.) His map made at the time is the standard to-day, no one having changed a latitude since.

Speaking of the naming of the River Heath after him, the Doctor writes on October 10, 1910:

> Col. PANDO was sent by Bolivia to survey and map the Madre de Dios River. He wrote me a letter offering to divide the command with me, but I was not able to get away. He, however, went, and on ascending the Madre de Dios River he found a river coming from the south to which he gave the name Heath. This now is one of the boundary lines between Peru and Bolivia.

Thus we have an authoritative statement as to the naming of the river.

Maj. FAWCETT details the first expeditions that were ever attempted to ascend the Heath. It was considered to be a short and unimportant forest stream, but in the controversy regarding the boundary line between Peru and Bolivia it was decided upon as being a convenient and satisfactory line of demarkation. It is reported that Gen. PANDO, probably at the time of the naming of the river, made an attempt to ascend the same, but after a disastrous encounter with the Indians he abandoned it. A Swiss named HELLER, with an expedition numbering 60 men, also made an attempt unsuccessfully. Heretofore all expeditions have been compelled to turn back because of the hostility of the Indians.

The author enlarges sufficiently on the dangers to be expected from the wild tribes and the disasters that have befallen former exploration parties to justify all that he has said and made him realize that only a small force of determined men of extraordinary physical capacity, completely organized, should attempt the work of ascending the Heath River. With this end in view, Maj. FAWCETT engaged three non-commissioned officers of the British Army, an ex-subaltern of the Northamptonshire Regiment, and a young doctor.

After an unsuccessful attempt to proceed overland to where the Heath River joins the Madre de Dios, during which the members of the expedition got a taste of the difficulties they might expect in the furtherance of their work, they descended the Tambopata River in a canoe until they arrived at the mouth of Heath River, which they proceeded to navigate, and there first encountered the Guarayos. That must certainly have been a hair-raising experience, for to sit in a rain of arrows each of which was some 7 or 8 feet in length, with a long barbed point, without being able to retaliate is undoubtedly as exciting an encounter as anyone could wish for.

Maj. FAWCETT, with great personal danger, managed to persuade the hostiles that he in no way intended to harrass them. Friendly relations were then set up and thereafter the exploring party was never threatened by the Indians.

However, there were numerous other difficulties to be overcome and sometimes disaster followed close upon the heels of the little party. A description of the venomous ants, poisonous flies, and reptiles, to say nothing of the vampire bat which exists in this section of the world, is enough to deter all save the most reckless in attempting to follow in Maj. FAWCETT'S footsteps.

If his conclusions regarding the auriferous deposits of this country are correct, however, there can be no doubt but that the future will bring about a boom here that will rival the 1849 days of California. The great difficulty heretofore has been the lack of transportation, but in Bolivia facilities will shortly exist for all mining ventures east of the Andes with the completion of the Transandine Railway from La Paz to the Beni, which the author considers as the finest railway proposition to-day in South America.

As a lure to the explorer and naturalist, Maj. FAWCETT hints at strange beasts and weird insects and the probability of the discovering of the mysterious white Indian, while the rumors of forest pigmies and old ruins are common.

The geographic world has much to thank Maj. FAWCETT for in the way of his explorations in South America, and as he contemplates further work in this line next year, it is certain that our knowledge of geography there will be considerably increased.

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"**The Panama Canal and Sea Power in the Pacific,**" by A. T. MAHAN, in "*The Century Magazine,*" for June. A paper from the fertile pen of Rear-Admiral MAHAN describing the duty of the United States in the matter of fortifying the Isthmian waterway rapidly nearing completion. Of course, Admiral MAHAN considers this one of the paramount duties of the United States. He takes the view that the Panama Canal is much more important to the United States than the Suez Canal was to England, and discusses this importance in relation to its bearing upon the sea power of the United States. Admiral MAHAN gives a new twist to the discussion when he emphasizes the importance of the canal as an influence in uniting the Anglo-Saxon races to the end of common advancement.

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"**The River of January,**" by NEVIN O. WINTER, in the June number of "*Travel.*" An article from the able pen of NEVIN O. WINTER descriptive of the beauties and magnificence of Rio de Janeiro and its harbor.

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"**The Grace and Gaiety of the Mexican Centennial,**" by ELLEN MAURY SLAYDEN, in "*The Independent,*" for May 25. In this short article Mrs. SLAYDEN, who is the wife of Congressman SLAYDEN, of San Antonio, Texas, describes the abounding hospitality which was shown the American delegation to the festivities of the Mexican Centennial last September. She gives a lively description of the different social functions given in honor of the visiting delegates and also a charming picture of the personalities of the former President DIAZ and his wife.

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"**The Irrigation of the Coast of Peru,**" by C. W. SUTTON, C. E., in "*Peru To-Day,*" of May. This article goes very largely into an interesting discussion of the economic development of Peru by irrigation. The author takes up, seriatim, geographical and hydrological conditions, the laborer, agriculture under the Incas, agriculture in Colonial times, and agriculture today.

The Pan American Commercial Conference, held under the auspices of the Pan American Union, last February, receives a few very flattering paragraphs in the same periodical.

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"**Sugar from Shredded Cane,**" in the May issue of "*The Cuba Review.*" A revolutionary process of the sugar industry is here described. While the work is still in the experimental stage, yet its effects will be so far-reaching and extraordinary that it is being watched with keenest interest by the heads of the sugar industry both in Cuba and the United States. We hope to have something further to say on this interesting subject later.

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"**South American Shoe Industry,**" by FRED A. COLLINS, in the "*Shoe and Leather Reporter,*" for May 25. Two columns are devoted here, giving the opinions of Mr. COLLINS on the advance and possibilities of the American shoe trade throughout South America.

"**The Panama-Pacific Exposition,**" appearing in the May number of "*The Architectural Record,*" enumerates the advantages which San Francisco holds for the World's Fair to be opened in 1915.

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"**The Immigration Problem in Brazil,**" in "*The Economist,*" for May 13, gives some interesting figures of this phase of Brazilian growth and development.

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"**The Guayra Falls, Parana River,**" in the May number of "*The Geographical Journal,*" is a review of a narrative by Mr. CLAUD RUSSELL, descriptive of his visit to the Guayra Falls in 1909.

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"**Financing Exports by Means of Shippers' Drafts,**" by FREDERICK C. HARDING, in "*Exporters' Review,*" for May. This comprehensive article explains the various ways by which export business may be financed by means of shippers' drafts. Mr. HARDING speaks with authority as he has had seven years' experience in the service of the Anglo-South American Bank at Antofagasta, Chile, and previously had been in the London office of the same bank. What he has to say is of special importance to exporters at this time, owing to the trade advancement everywhere apparent throughout South America.

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"**West Coast of South America,**" in the same issue, is an appreciation of the work of the firm of W. R. GRACE & Co.

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"**Efectos del Canal de Panama en el Comercio del Mundo,**" is an article in Spanish, by JOHN BARRETT, the Director General of the Pan American Union, in the same number of the "*Exporters' Review.*" The paper deals with the opportunities for investment and trade in South America that will be opened to the world with the completion of the Panama Canal.

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"**A Latin-American Business Establishment,**" in the "*American Exporter,*" for June. An article describing the offices, warehouses, and factory of a Peruvian firm that will be a surprise to American merchants unfamiliar with the South American way of conducting business.

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"**Export Problems,**" by B. OLNEY HOUGH, in the same issue of the "*American Exporter.*" This is the third of the commendable series of articles on export problems by Mr. HOUGH.

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"**The Railways of Brazil,**" by LIONEL WIENER, in "*Cassier's Magazine*" for June. The concluding article of the series which has been running in this periodical during the past year, gives a general review of the railroad situation of the great South American Republic and the work that has been carried on during the last half century in its development.

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"**Some Traits of President Roosevelt,**" by Rev. CHARLES WARREN CURRIER, P. D., is an appreciative article appearing in the "*Hiberno-Argentine Review.*" Father CURRIER gives a truthful estimate of the character of the famous former President, and because of similar tastes dilates on the literary ability of Mr. ROOSEVELT.

The article takes a tone of frank admiration inspired no doubt by the friendly relations existing between the biographer and the subject of his paper.

No one interested in Pan America can afford to neglect the May number of "**The Annals of The American Academy of Political and Social Science,**" which volume discusses the "*Political and Social Progress*" in Latin America. In this is a collection of papers and speeches, the work of eminent Pan Americanists, such as the Hon. ELIHU ROOT, Senator from New York; Hon. HENRY WHITE, former Ambassador to France and Chairman of the American Delegation to the Fourth International Conference of the American States; Dr. GUILLERMO SUBERCASEAUX, Professor of Political Economy, University of Chile; Hon. ERNESTO QUESADA, Attorney General of the Argentine Republic, Professor in the Universities of Buenos Aires and La Plata; WILFRED H. SCHOFF, Secretary Commercial Museum, Philadelphia; CHARLES A CONANT, former Commissioner on the Coinage of the Philippine Islands, New York; Hon. HENRY L. JANES, Division of Latin American Affairs, Department of State; and a number of other eminent experts on things Pan American.

Naturally the work is too extensive to be quoted here. However, we tabulate the table of contents and recommend that our readers obtain copies of this valuable publication.

"Individual Effort in Trade Expansion," Hon. ELIHU ROOT.

"The Fourth International Conference of the American States," Hon. HENRY WHITE.

"The Fourth Pan American Conference," PAUL S. REINSCH.

"The Monroe Doctrine at the Fourth Pan American Conference." Hon. ALEJANDRO ALVAREZ.

"Banking in Mexico," Hon. ENRIQUE MARTINEZ-SOBRAL.

"The Way to Attain and Maintain Monetary Reform in Latin America," CHARLES A. CONANT.

"Current Misconceptions of Trade with Latin America," HUGH MACNAIR KAHLER.

"Investment of American Capital in Latin American Countries," WILFRED H. SCHOFF.

"Commerce with South America."

"Public Instruction in Peru," ALBERT A. GIESECKE, Ph. D.

"The Monetary System of Chile," Dr. GUILLERMO SUBERCASEAUX.

"The Social Evolution of the Argentine Republic," Hon. ERNESTO QUESADA.

"Commercial Relations of Chile," Hon. HENRY L. JANES.

"Closer Commercial Relations with Latin America," BERNARD N. BAKER.

"Immigration—A Central American Problem," ERNST B. FILSINGER.

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"**South America is Conserving,**" a paper by JOHN BARRETT, in "*American Conservation*," for May, describes the immense timber resources of the South American continent, and the constructive conservation work that is now being so successfully undertaken in each of the different Latin-American Republics.

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"**Mexico and Her Resources,**" by ROMULO ESCOBAR, in the same periodical gives a short review of the agricultural and other possibilities of Mexico.

"**Latin America and The Octopus of the North,**" by EDWARD PERRY, in the June number of "*The Trend*," is a somewhat frank discussion of what the author conceives to be the reasons why there is a certain prejudice against the United States throughout all Latin America.

While we do not altogether agree with the author in his premises and conclusions, still admitting that he is justified to a certain extent in what he says, we feel that he has not given sufficient importance to the work done first by Senator ROOT in promoting a better understanding among the peoples of Latin-American States and the United States, and the efforts of JOHN BARRETT as Director General of the Pan-American Union in his unceasing propaganda in the interests of commerce and comity throughout the twenty-one republics of the Western Hemisphere.

The implied criticism of the State Department is unfortunate, as it is nearly always impossible for the outsider to understand what necessities frame the policies of administration under different circumstances.

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"**Col. George Washington Goethals, Canal Builder,**" by WILLIAM ATHERTON DUPUY, in the "*Scientific American*" for June 10, describes the personal characteristics of the man who has charge of canal construction.

The article gives some details as to the unique methods of procedure necessarily brought about by carrying out the work of this character, where the personal equation enters so largely into the successful solution of the many problems that arise throughout each working day.

The author convinces us that Colonel GOETHALS by his own work has inspired a spirit of emulation that is doing so much to bring about the rapid completion of the Canal.

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"**Panama's Purse,**" by EDWARD PERRY, is an article in the "*Overland Monthly,*" June issue, in which the author gives a detailed statement of the finances of Panama for the year 1910, as compared with the year 1900. Actual conditions, however, give no justification for Mr. Perry's prophecy of financial disaster with the withdrawal of the working forces from the Canal Zone.

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"**Mining Conditions in Bolivia,**" by GEO. N. DEAN, in "*The Mexican Mining Journal*" for June, describes the mineral wealth of Bolivia. The difficulty heretofore has been that the mineral wealth can not be developed with profit, because of the almost insurmountable transportation difficulties. However, in this article Mr. DEAN tells us that there are a great number of mines that are being successfully worked. The present conditions, however, do not offer large promise of tin exports, the principal industry of Bolivia, as the following table will show.

"The following is an 'account sales' on a shipment of tin ore, which for convenience we quote in United States currency:

London quotation tin $700 per ton of 2,240 pounds.

Grade of ore 65 per cent metallic tin.

| | |
|---|---|
| Quotation for 65 per cent ore in Liverpool | $390.00 |
| Freight La Paz to Mollenda, Peru | 14.28 |
| Duties, transfer charges, etc., at port of entry | 2.52 |
| Freight, Mollendo to Liverpool | 13.20 |
| Assaying, brokerage, commission, insurance, cartage, etc., at Liverpool | 14.64 |
| Miscellaneous | 2.40 |
| Total expense per ton of ore | 60.00 |

"From the net proceeds of the sale must be deducted the cost of mining, milling, concentration, and transportation to the railroad, the latter of which items alone often amounts to from $60 to $70 per ton.

"The small operator is forced to sell his product to local dealers at a price ranging from $150 to $200 per ton, as few or none are able to hold their concentrates until enough for a shipment has been accumulated and to wait until settlement has been made, which is usually from 60 to 90 days from the date of shipment. The tin ore is at present all shipped to England, Germany, and France."

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"**Brazil at The Hague**" is a reprint from the "*Review of Reviews*" of November, 1907, in which the active work of the Brazilian Peace Delegation is set forth informatively.

# SUBJECT MATTER OF CONSULAR REPORTS

## REPORTS RECEIVED UP TO JUNE 1, 1911.

| Title. | Date. | Author. |
|---|---|---|
| ARGENTINA. | | |
| Argentine Foreign Trade, 1909—official publication regarding. | Mar. 8 | R. M. Bartleman, Consul General, Buenos Aires. |
| Prices of beer in Rosario | Mar. 10 | H. V. Coffin, Consul, Rosario. |
| Argentine meat trade—growth of exportations | Mar. 11 | R. M. Bartleman, Consul General, Buenos Aires. |
| Bolsa de Comercio—transmitting Annual Report of, 1910 | Mar. 18 | Do |
| Sale of optical goods in Rosario | Mar. 23 | H. V. Coffin, Consul, Rosario. |
| Importations of champagne, 1910 | ...do... | R. M. Bartleman, Consul General, Buenos Aires. |
| Automobiles in Buenos Aires—municipal statistics of | Mar. 26 | Do. |
| Creation of office of "Lands, Immigration, and Agricultural Defense." | Mar. 27 | Do. |
| Trade Notes: Population of Buenos Aires. Oil Company will erect a refinery at Zarate. Taxicab company organized in Paris. Commercial Defense League petitioned Minister of Finance that the rebate on duty on imported sugar be made permanent. Mr. J. S. Attwell appointed to investigate and report on prospects of cotton cultivation in the Chaco and Misiones territories. | Mar. 30 | Do. |
| Exports declared | Mar. 31 | Do. |
| Trade Notes: Importation of newspaper printing paper. Steamer succeeded in establishing wireless communication from Port Stanley, Falkland Islands, to Punta de Este (1,000 miles). Steamship company informed Argentine Government that it is prepared to use fuel oil on its steamers if the Government will guarantee sufficient supply of oil. | Apr. 7 | Do. |
| Threatened advance in freight rates to United States | ...do... | Do. |
| Report entitled, "Studies in the Commerce of the United States with South America." | Apr. 27 | C. L. Chandler, Consul Assistant, Buenos Aires. |
| BOLIVIA. | | |
| Latest statistics regarding number of kilometers of railway in construction, in operation, and projected in Bolivia. | Apr. 11 | Maddin Summers, Chargé d'Affaires. |
| BRAZIL. | | |
| Axes and tools | Mar. 18 | J. White, Consul, Santos. |
| Mineral production in Brazil | Mar. 30 | J. J. Slechta, Vice Consul in Charge, Rio de Janeiro. |
| Annual review of commerce and industries, Brazil, 1910 | Apr. 1 | Do. |
| Alcohol for industrial and other uses in Brazil | Apr. 13 | Julius G. Lay, Consul Genenal, Rio de Janeiro. |
| CHILE. | | |
| Consumption of tea, coffee, and yerba maté | Mar. 27 | A. A. Winslow, Consul, Valparaiso. |
| Importation of plants and seeds from foreign countries | Mar. 28 | Do. |
| Port improvements at Valparaiso | Apr. 1 | H. P. Fletcher, United States Minister. |
| Leasing Chilean Government railways | Apr. 3 | A. A. Winslow, Consul, Valparaiso. |
| Chilean railways need rolling stock, etc | ...do... | Do. |
| Market for American goods, and how to enter same | Apr. 4 | Do. |
| Trade and Industrial Notes: Chile's exports for January, 1911. Deaths from tuberculosis in Chile. Operating expenses of Chilean railways. Production of nitrate. Result of whale hunt. First locomotive constructed in Chile tested. Effort being made to have rural holdings divided into smaller tracts. | ...do... | Do. |
| West coast information agency | Apr. 5 | Do. |
| Production of tin | Apr. 11 | Do. |
| Increased parcels-post business | Apr. 14 | Do. |
| COLOMBIA. | | |
| Government control of insurance | Mar. 29 | Chas. H. Small, Vice and Deputy Consul General, Bogota. |
| Suggestions as to methods of increasing American commerce in Republic of Colombia. | Apr. 4 | Do. |
| Prices of beer in Barranquilla, Colombia | Apr. 13 | A. L. Burnell, Vice Consul, Barranquilla. |

*Reports received up to June 1, 1911*—Continued.

| Title. | Date. | Author. |
|---|---|---|
| COSTA RICA. | | |
| Wood alcohol | Apr. 19 | Chester Donaldson, Consul, Port Limon. |
| CUBA. | | |
| Bill granting free entry of steam boilers, gasoline, etc | Apr. 12 | J. B. Jackson, American Minister, Havana. |
| Design for the "Medalla de la Independencia" to be given to officers and men who were members of the army of liberation. | Apr. 17 | Do. |
| Bill passed regulating practice of pharmacy in Cuba | Apr. 19 | Do. |
| DOMINICAN REPUBLIC. | | |
| Report on wood alcohol | Apr. 25 | P. E. Holland, Consul, Puerto Plata. |
| ECUADOR. | | |
| Motor cars | Mar. 27 | G. D. Hedian, Consular Agent, Esmeraldas. |
| Lumber | Mar. 30 | Do. |
| Shoe machinery | Mar. 31 | Do. |
| Sheep and horse-clipping machinery | ...do.... | Do. |
| Catalogues, price lists, and discounts | ...do.... | Do. |
| Pianos—importance of giving prices and terms | Apr. 1 | Do. |
| Hardwoods | ...do.... | Do. |
| Instructions for operating ice machinery | ...do.... | Do. |
| Motor-boat engines | Apr. 2 | Do. |
| Importance of American manufacturers giving full information regarding prices, etc. | Apr. 5 | Do. |
| Wood alcohol in Ecuador | Apr. 6 | H. R. Dietrich, Consul General Guayaquil. |
| Marine gasoline motors | ...do..... | G. D. Hedian, Consular Agent, Esmeraldas. |
| Expanded metal reenforcing for concrete | ...do..... | Do. |
| Shipment of asphalt | Apr. 17 | H. R. Dietrich, Consul General, Guayaquil. |
| GUATEMALA. | | |
| Carib Indians | Feb. 25 | E. Reed, Consul, Livingston. |
| Banana industry | Apr. 6 | Geo. A. Bucklin, jr., Consul General, Guatemala City. |
| Opening for investment | Apr. 20 | Do. |
| Opening for engineering | ...do..... | Do. |
| Market for numbering machines | Apr. 21 | Do. |
| Market for American goods | ...do..... | Do. |
| Market for hammocks. Duty | ...do..... | Do. |
| How to travel through Guatemala | ...do..... | Do. |
| Market for pianos | Apr. 22 | Do. |
| Market for ready-made clothing | ...do..... | Do. |
| Reeds and rattans. Furniture manufactures | May 2 | Do. |
| Trade in cacao beans | ...do..... | Do. |
| Distribution of goods sold to Central American countries | ...do..... | Do. |
| HONDURAS. | | |
| Opening of the "Centro Social" | Jan. 19 | A. T. Haeberle, Consul, Tegucigalpa. |
| New chapter in the history of Honduras | Mar. 22 | Do. |
| Automobiles | ...do..... | H. Schmuck, consul, Amapala. |
| Gasoline stoves and ovens | Mar. 31 | A. T. Haeberle, Consul, Tegucigalpa. |
| Metal ceiling, etc | ...do..... | Do. |
| Annual report on Honduras | Apr. 12 | Do. |
| Commerce of Truxillo. Cattle trade | Apr. 14 | Allen Gard, Consul, Ceiba. |
| Commerce and industry | Apr. 21 | Do. |
| Automobiles | Apr. 29 | Do. |
| Outlook for commercial acids | May 1 | Do. |
| MEXICO. | | |
| Newspaper clipping regarding contemplated expenditures by Guadalajara. | Jan. 19 | S. E. Magill, Consul, Guadalajara. |
| List of classified business men of Matamoros | Jan. 25 | J. H. Johnson, Consul, Matamoros. |
| No quarantine against Havana, Cuba | Feb. 28 | W. W. Canada, Consul, Veracruz. |
| Trade report: Large increase in exportation of tomatoes and other vegetables from Mexico through the port of Nogales. | Apr. 12 | A. V. Dye, Consul, Nogales. |
| Aguacate plant and its seeds | Apr. 18 | T. W. Voetter, Consul, Saltillo. |
| Belting industry in San Luis Potosi | Apr. 19 | W. L. Bonney, Consul, San Luis Potosi. |

*Reports received up to June 1, 1911*—Continued.

| Title. | Date. | Author. |
|---|---|---|
| MEXICO—continued. | | |
| Electric signs—How to enter market | Apr. 19 | M. Letcher, Consul, Chihuahua. |
| Zapupe fiber | Apr. 20 | G. B. McGoogan, Consul, Progreso. |
| Newspapers of Sonora | Apr. 25 | L. Hostetter, Consul, Hermosillo. |
| Report on animal fiber, resembling silk, found in Mexico | Apr. 26 | C. E. Guyant, Vice and Deputy Consul General, Mexico City. |
| Corsets | Apr. 28 | A. J. Lespinasse, Consul, Frontera. |
| Railway concessions | Apr. 29 | C. A. Miller, Consul, Tampico. |
| Traffic on the Tehuantepec Route for 1910 | ...do..... | L. W. Haskell, Consul, Salina Cruz. |
| Declared exports from the Tampico Consular District to the United States for the quarter ending March 31, 1911. | May 2 | C. A. Miller, Consul, Tampico. |
| Value of catalogues on file at Consulate | ...do..... | L. Hostetter, Consul, Hermosillo. |
| Best distributing center for oil pumps | May 3 | C. A. Miller, Consul, Tampico. |
| Guayule rubber shipments | May 11 | L. T. Ellsworth, Consul, Ciudad Porfirio Diaz. |
| PANAMA. | | |
| Wood alcohol | Apr. 29 | A. Snyder, Consul, Panama. |
| PERU. | | |
| Tariff on mild steel | Mar. 25 | W. H. Robertson, Consul General, Callao. |
| Use of wood alcohol in Peru | Apr. 12 | Do. |
| Cotton production of Peru | ...do..... | Do. |
| SALVADOR. | | |
| Changes in the customs tariff system of Salvador | Apr. 7 | H. D. Clum, Vice Consul General San Salvador. |
| Use of wood alcohol in Salvador | Apr. 8 | Do. |
| Changes in the customs tariff system of Salvador | Apr. 19 | Do. |
| Reduction of import duties on materials for candles and soap. | Apr. 22 | Do. |
| Act providing for the free entry of cotton seeds and machinery for cotton weaving. | ...do .... | Do. |
| Information bureau in the Department of Agriculture of Salvador. | Apr. 28 | Do. |
| URUGUAY. | | |
| New tariff for loading and unloading construction material | Mar. 18 | F. Goding, Consul, Montevideo |
| Recent all-rail journey from Montevideo to Rio | Mar. 22 | E. V. Morgan, American Minister, Montevideo. |
| Investigation of animal and industrial education with the primary and secondary schools of United States and Canada. | Mar. 25 | F. Goding, Consul, Montevideo. |
| Consular bulletin to be published by the Government of Uruguay. | ...do .... | Do. |
| Scientific fish culture to be fostered in Uruguay | ...do..... | Do. |
| Meat experts wanted in Uruguay | Mar. 27 | Do. |
| Gold loan to be issued by Government of Uruguay | Mar. 31 | E. V. Morgan, American Minister, Montevideo. |
| Application of the new municipal loan | Apr. 3 | F. Goding, Consul, Montevideo. |
| Purchase of paintings | Apr. 4 | E. V. Morgan, American Minister, Montevideo. |
| Two important bridges to be built in Uruguay | Apr. 6 | Do. |
| Revision of some Uruguayan duties | ...do..... | F. Goding, Consul, Montevideo. |
| Estimates for Montevideo port works extension | Apr. 8 | Do |
| VENEZUELA. | | |
| Increase in tourists' excursion business to the West Indies and Spanish Main. | Mar. 27 | I. A. Manning, Consul, La Guaira. |
| Presidential decree of April 1 regarding classification of rubber for tires. | Apr. 4 | J W. Garrett, Consul, Caracas. |
| Rubber tires for carriages | ...do..... | I. A. Manning, Consul, La Guaira. |
| Duty on gasoline reduced in Venezuela | Apr. 5 | Do. |
| Extension of contract for steam vessels between Cano Colorado and Cristobal Colon, Venezuela. | ...do..... | Do. |
| Presidential decree of April 4 transferring gasoline and benzine from the fourth to the first class of the tariff. | ...do..... | J. W. Garrett, Consul, Caracas. |
| New steamship service between Trinidad and Venezuelan ports. | Apr. 6 | I. A. Manning, Consul, La Guaira. |
| Automobiles in Venezuela | ...do..... | Do. |
| Customs tariff on preserved and tinned meats and fish reduced in Venezuela. | Apr. 7 | Do. |
| Resolution on the assessment of gasoline and benzine | ...do..... | H. R. Wright, Consul, Puerto Cabello. |
| Resolution on the assessment of preserved foods | Apr. 8 | Do. |
| Tariff changes in Venezuela | Apr. 21 | I. A. Manning, Consul, La Guaira. |
| Silkworm culture in Colombia | ...do..... | Do. |

*Reports received up to June 1, 1911*—Continued.

| Title. | Date. | Author. |
|---|---|---|
| VENEZUELA—continued. | | |
| Wood alcohol | Apr. 22 | H. R. Wright, Consul, Puerto Cabello. |
| Badly packed empty bottles | ...do..... | I. A. Manning, Consul, La Guaira |
| Railway traffic in Venezuela during 1910 | ...do..... | Do. |
| Catalogues for Venezuela should not be sent by parcels post. | Apr. 26 | R. J. Totten, Consul, Maracaibo. |
| Wood alcohol | ...do..... | Do. |
| Prices of produce in Maracaibo | ...do..... | Do. |



THE NEW VENEZUELAN REVENUE CUTTER "29 DE ENERO."

This revenue cutter (Guarda-Costa), the first built in Venezuela, was constructed in the National Shipyards at Puerto Cabello, under the technical direction of Sr. José Fernando Capriles, engineer.

# ARGENTINE REPUBLIC

## CHANGES IN THE BUDGET.

The Argentine budget as originally presented for 1911 has been changed as follows:

| | National currency.[a] |
|---|---|
| Suppressed items | $9,457,886.81 |
| Reduction in items | 40,572,774.93 |
| Delayed items | 17,890,900.98 |
| Total | 67,921,562.72 |

## NEW BUREAU CREATED.

The United States consul general at Buenos Aires reports that there has been created by Executive decree, in the National Territories of the Pampa, Rio Negro, Neuquen, Chubut, Santa Cruz, and Misiones, an office to be known as the "Lands, immigration, and agricultural defense." This will come under the supervision of the Ministry of Agriculture, and will be charged with such various duties as the preservation of the forests, ejectment of trespassers from the State lands, and encouragement and assistance of colonizers.

## GROWTH OF AUTOMOBILE IMPORTS.

The following table shows the number of automobiles imported into the Argentine Republic from 1900 to 1910, inclusive:

| Years. | Number of automobiles. | Years. | Number of automobiles. |
|---|---|---|---|
| 1900 | 9 | 1906 | 712 |
| 1901 | 16 | 1907 | 610 |
| 1902 | 28 | 1908 | 495 |
| 1903 | 62 | 1909 | 831 |
| 1904 | 129 | 1910 | 1,581 |
| 1905 | 377 | | |

The invoice value of the automobiles imported in 1910 was $1,368,209, placing an average value on each machine of $865.

## AGRICULTURAL SCHOOL AT LA PLATA.

The Government of the Province of Buenos Aires has decided to establish a school of agriculture in conjunction with the Zoological Garden of La Plata.

[a] Paper peso equivalent to $0.4246 United States gold.

## PROPOSED FOREIGN EXHIBITS OF ARGENTINE PRODUCTS.

The Bureau of Commerce and Industry, Department of Agriculture, has proposed a new method for making known the Argentine products throughout the principal commercial centers of the world. Under this plan samples of stock, agricultural, forestal, mineral, and industrial products will be prepared and sent to leading commercial museums for the information and inspection of interested parties. These samples will consist of wool, hides, skins, cereals, woods, ores, flour, preserved fruits, etc. The propaganda will be commenced in Europe and if satisfactory results are obtained it will be extended to other parts of the world.

## SHOE INDUSTRY OF THE REPUBLIC.

One of the most prosperous and growing industries of the Argentine Republic is the manufacture of boots and shoes. The great center of this industry is the municipality of Buenos Aires. Here there are 223 shoe manufactories, with a total capital of about $2,500,000, employing 6,800 people, and having an annual output valued at over $8,000,000.

There are also 7 factories in the Province of Santa Fe, 5 in Tucuman, 7 in Cordoba, and 3 in other sections of the Province of Buenos Aires. Some of the larger establishments produce as many as 840,000 pairs of shoes per year.

Notwithstanding the importance of this industry in the country, the import trade of boots and shoes is of considerable volume, there having been imported in 1910, 173,956 dozen pairs of boots and shoes.

## VEGETABLE-OIL INDUSTRY.

There are 15 factories in Buenos Aires engaged in the preparation of vegetable oils for consumption in the Republic. These factories use largely peanut oil as a base, and sell about $2,500,000, national currency, of the refined product annually. Large quantities of olives and olive oils are imported into the Republic annually. In 1910 these imports consisted of 4,929 tons of olives and 29,574 tons of olive oil. In addition to the foregoing, the imports of cottonseed oil in 1910 aggregated 2,621,879 kilos, and that of other oils 735,069 kilos. It is claimed that the olive tree, cotton plant, and other vegetables from the fruit and seed of which imported oils are made can be grown in abundance in several provinces of the Republic, and the development of this industry on a large scale is being seriously contemplated.

## MISCELLANEOUS CONSULAR NOTES.

The minister of public works has approved the plans for the irrigation works at San Carlos, Salta, at a cost of $312,505 United States currency.

The Practical School of Aviculture at La Plata has been opened with 25 pupils.

The consul general at Buenos Aires advises that the Commercial Defense League has petitioned the minister of finance that the rebate on the duty on imported sugar be made permanent.

Another report from the same source advises that the prospects of cotton cultivation in the Chaco and Misiones Territories are being investigated by experts.

The importation of newspaper printing paper into Argentina in 1910 amounted to 23,230 tons, an increase of 7,101 tons over the importations of 1909.

The Pacific Steam Navigation Co.'s steamer *Orcoma*, on a recent voyage from the west coast to Montevideo, succeeded in establishing wireless communication from Port Stanley, Falkland Islands, to Punta del Este, on the Uruguayan coast, a distance of 1,000 miles.

### CAPITAL INVESTED IN RAILWAYS IN 1910.

At the close of 1910 the capital invested in the railways of the Republic amounted to $981,349,000 Argentine gold, $874,049,000 of which represented money invested in private lines, and $107,300,000 invested in State railways. On December 31, 1909, the amount invested in the railways of the country was $898,913,000 Argentine gold, so that the investment in railways for 1910 represents an increase of $82,436,000 Argentine gold.

There were at the close of 1910 approximately 25,200 kilometers of railways in the Republic, as compared with 23,740 kilometers in 1909. It is estimated that the length of the Argentine railways in 1911 will be 26,500 kilometers. The budget for 1911 carries an appropriation of $11,996,700, national currency, for the development of State railways.

### TRAMWAYS OF BUENOS AIRES.

The Buenos Aires Tramway Co. was incorporated in 1877 and reorganized in 1887. From that time to 1900 the capitalization of this company was fixed at about £1,000,000. In 1900 electricity was substituted for horse traction and another reorganization was effected merging all the branch lines into one company, now having an authorized capitalization of over £23,199,000.

At present the tramway lines have a total length of 352 miles of single track, and a subway, in process of construction, estimated to cost £5,000,000. It is hoped to have a section of this subway ready for operation in 1913.

The receipts of the tramways for 1910 aggregated £2,419,186, against £1,564,093 expenditures, making possible a dividend of 7¾ per cent. In 1910 the lines owned 2,156 cars, which covered 42,881,395 miles during the year.

### PROPOSED RAILWAY FROM SAN JUAN TO JACHAL.

A railway is soon to be constructed from San Juan to the town of Jachal. The route to be traversed by this line is through one of the most fertile portions of the Province of San Juan, while the town of Jachal, situated on the Jachal River, Province of that name, is an important wheat producing and milling center. In the neighborhood are extensive areas devoted to grape culture and the production of barley, cotton, and flax.

## BOLIVIA

### FEDERAL AND DEPARTMENTAL BUDGETS.

The budget of the Federal Government of Bolivia for 1911 shows the following expenditures:

| Expenditures for account of: | Boliviano.[a] |
|---|---|
| Legislative department | 340,382.00 |
| Foreign relations and worship | 926,735.00 |
| Interior and fomento | 3,265,263.00 |
| Treasury | 5,221,774.94 |
| Justice and industry | 1,360,643.80 |
| Instruction and agriculture | 1,981,236.24 |
| War and colonization | 4,709,823.56 |
| Total | 17,805,858.54 |
| The Federal receipts for the same period are estimated at | 13,141,175.00 |

The expenditures of the departmental budget for 1911 are estimated at 3,095,822.28 bolivianos, while the receipts are fixed at an equal amount, apportioned as follows:

| Departmental revenues: | Boliviano.[a] |
|---|---|
| Chuquisaca | 249,903.00 |
| La Paz | 1,208,860.10 |
| Cochabamba | 337,259.00 |
| Oruro | 262,076.18 |
| Potosi | 560,000.00 |
| Tarija | 146,472.00 |
| Santa Cruz | 190,142.00 |
| Beni | 141,110.00 |
| Total | 3,095,822.28 |

### BOUNDARY PROTOCOL WITH PERU.

The minister of Bolivia in Peru and the secretary of foreign relations of the Bolivian Government signed at Lima, April 15, 1911, the protocol fixing the bases and defining the rules governing the Mixed Boundary Commission, which, according to the agreement of

[a] The boliviano is equal to $0.389 United States gold.

September 17, 1909, has been appointed to establish the boundary between Bolivia and Peru.

To facilitate the work of the commission the boundary line has been divided into four sections. This division does not include that part of the boundary line separating the Madre de Dios and Acre Rivers until an agreement is arrived at regarding same or until the arbitration decision provided for in the protocol of March 30, 1911, concerning the Manuripe boundary has been rendered. This part of the boundary line will then be further referred to a subcommittee selected from the mixed committee.

The protocol indicates the principal points at which landmarks are to be erected by the mixed commission, and if in the placing of these doubts or difficulties should arise which can not be settled by the commission then the dispute shall be submitted to the board of directors of the Royal Geographic Society of London, whose decision in the matter shall be final.

## EXPORTS FROM NEW YORK TO BOLIVIA, APRIL AND MAY, 1911.

Through the courtesy of the Bolivian minister at Washington, Señor Don Ignacio Calderon, the Bulletin is enabled to publish the following table showing the exports from New York to Bolivia for the months of April and May, 1911:

| | April. | May. |
|---|---|---|
| Cotton goods | $17,677.72 | $21,605.00 |
| Foodstuffs | 5,003.00 | 4,161.37 |
| Hardware | 9,606.39 | 1,968.90 |
| Flour | 3,514.50 | 22,758.50 |
| Machinery | 4,086.98 | 13,026.36 |
| Miscellaneous | 35,554.45 | 36,115.25 |
| Totals | 75,443.04 | 99,635.38 |

## AGRICULTURAL SCHOOL AT POTOPOTO.

The inauguration of the agricultural school of the Federal Government in the Potopoto Valley, at Sopocachi, near La Paz, Bolivia, took place April last. The minister of public instruction and agriculture, Señor M. B. Mariaca, Dr. Felipe Guzman, inspector general of education, and a large number of prominent teachers and agriculturists were present at the exercises. Mr. Agustin Luna Pizarro, a practical agricultural engineer of wide experience and a noted botanist, is director of the institution. It is probable that a veterinary department will be added to this school later.

## COMPLETION OF CUSTOMHOUSE AT QUIACA.

The customhouse at Quiaca, an important railway station on the boundary line between Bolivia and the Argentine Republic, has been completed. It is at this point that the Northern Argentine Railway enters Bolivia. The town itself is situated in a rapidly developing commercial, industrial, and agricultural section of country.

## EXTENT OF BOLIVIAN RAILWAYS.

A recent report from MADDIN SUMMERS, Esq., the United States chargé d'affaires ad interim, at La Paz, Bolivia, furnishes the following statistics in regard to the number of kilometers of railway in construction, in operation, and projected in Bolivia up to April 11, 1911:

BOLIVIAN RAILWAYS. LINES OPENED FOR TRAFFIC.

| | |
|---|---|
| 1. The Antofagasta (Chile) & Bolivia Railway Co. (Ltd.), 75-centimeter gauge. Now being converted to meter gauge. Bolivian section of line.....kilos.. | 484 |
| 2. The Guaqui to La Paz Railroad. Constructed by the Government of Bolivia and sold in July, 1910, to the Peruvian Corporation, an English company. Meter gauge road from Lake Titicaca to the city of La Paz. | |
| Steam section from Guaqui to the heights of La Paz.....kilos.. | 89 |
| Electric section from the heights of La Paz down into the city..do.... | 9 |
| Total..... | 98 |
| 3. Viacha and Oruro Line; meter gauge. Constructed by the Bolivian Railway Co. (Ltd.) and American company, under contract dated May, 1906, between the Bolivian Government and Messrs. Speyer and the National City Bank of New York. Length of line.....kilos.. | 202 |
| Total length of lines opened for traffic..... | 784 |

LINES IN CONSTRUCTION.

| | |
|---|---|
| 1. The Arica to La Paz Railway; meter gauge. Line being constructed by the Chilean Government under treaty with Bolivia, 1904. Sir John Jackson (Chile) (Ltd.), contractors. Bolivian section from the frontier to Viacha.....kilos.. | 208 |
| 2. Rio Mulato to Potosi; meter gauge. Line being constructed by the Bolivian Railway Co. (Ltd.), under modified contract between the Bolivian Government and Messrs. Speyer. The Antofagasta (Chile) & Bolivia Railway Co. (Ltd.), constructors.....kilos.. | 170 |
| 3. Oruro to Cochabamba Line; meter gauge. Line in construction by the Antofagasta Co. under the same conditions as the preceding line.....kilos.. | 200 |
| 4. Uyuni to Tupiza Line; meter gauge. Work commenced by the Antofagasta Co. under modified Speyer contract.....kilos.. | 200 |
| 5. The Antofagasta & Bolivia Railway Co. (Ltd.). Separate entrance to the city of La Paz granted by the National Congress in 1911; meter-gauge road, to be worked by steam; 2½ per cent grade.....kilos.. | 28 |
| 6. Cochabamba Electric Railway; 75-centimeter gauge. Being built by a native company, the Electric Light & Power Co. of Cochabamba..... | 90 |
| Total lines under construction..... | 896 |

On the lines now being constructed 260 kilometers of track are laid, and on the following lines passenger traffic is worked provisionally by the contractors:

| | |
|---|---|
| Viacha to Corocoro.....kilos.. | 70 |
| Rio Mulato to Potosi.....do.... | 60 |
| Oruro to Banderani.....do.... | 62 |
| Total..... | 192 |

Of the 90 kilometers of the 75-centimeter line in the Cochabamba Valley, 13 are now open for traffic.

In addition to the lines open for traffic and under construction, a private line (75-centimeter gauge), 33 kilometers in length, owned and worked by the Huanchaca Co., runs from the Uyuni Station of the Antofagasta Railway to the company's property at Pulacayo.

And the La Paz Electric Tramways (meter gauge), 5 kilometers in length, are owned and worked by the Bolivian Rubber & General Enterprise (Ltd.), and form a continuation of the electric section of the Guaqui to La Paz Railway right into the streets of the city.

Congress has authorized the Executive to contract for the extension of this electric system from the city of La Paz down the valley of the La Paz River.

# BRAZIL

## MESSAGE OF THE PRESIDENT.

At the opening of the Brazilian Congress, May 3, 1911, President HERMES DA FONSECA presented his annual message, in which he summarized existing conditions and recommended the adoption of various legislative measures.

The President referred to the tranquillity prevailing at the present time throughout the Republic and commented on the recent naval difficulty. He then dwelt, at some length, on the international relations of Brazil and enumerated the various conventions and treaties concluded during the year; also the congresses, conventions, and celebrations of various countries to which it had been invited. Since the last message was presented Brazil had entered into treaties with Colombia, Greece, Russia, Austria-Hungary, Uruguay, and Paraguay.

The Brazilian-Peruvian Arbitration Court, sitting at Rio de Janeiro, concluded its labors on June 30, 1910, after having adjudicated 91 claims.

One of the most important acts of the administration, according to the message, was the promulgation, on April 5, 1911, of the decree reforming the public-school system of Brazil. Under the new law secondary and higher education are practically under the control of a board of education.

Referring to the railway development, the President stated that 1,870.68 kilometers were added to the railway mileage of the Republic during the year, making a total mileage now of 21,370.19 kilometers. The telegraph system, too, was extended, there now being in operation 629 stations, as against 596 in 1909.

The message then discussed the financial status of the country and urged economy in public expenditures in order to reduce the deficit. The condition of the treasury and the national debt were also taken up by the President.

In conclusion, the President quoted the export and import trade figures for 1910, which showed a remarkable increase and a substantial balance of trade in favor of Brazil.

## NEW REGULATIONS OF THE BRAZILIAN NAVAL ACADEMY.

The Diario Official of April 6, 1911, contains the new regulations of the Brazilian Naval Academy. An important provision of the new law is that providing for the establishment of a special course for naval officers, which will include the study of international law, tactics and strategy, naval organization and administration, coast defense, naval sanitation, etc. It is understood that it is the intention of the Government to engage foreign naval experts for this course.

## BRAZILIAN JURIDICAL CONGRESS.

The second national Juridical Congress will meet at Sao Paulo, on August 11, 1911, under the auspices of the "*Instituto da Ordem dos Advogados Brazileiros.*"

## POSTPONEMENT OF INTERNATIONAL CONFERENCE OF JURISTS.

The International Conference of Jurists which was to have met at Rio de Janeiro on May 21 of the present year has been postponed until April 22, 1912. The drafts of the Codes of International Private Law and International Public Law have already been prepared and are now ready for submission to the various Governments which expect to send delegates to the Conference.

## FOREIGN COMMERCE FOR 1910.

A commercial review of Brazil for the year 1910 is the contents of a comprehensive report recently submitted by Vice Consul General J. J. SLECHTA, of Rio de Janeiro. From it we are pleased to quote the following data on the foreign trade of that country for the past year:

The value of Brazilian exports and imports to and from foreign countries amounted to $545,581,275, as compared with $488,021,954 in 1909 and $386,286,447 in 1908. The increase in 1910 over the previous year, amounting to more than $50,000,000, was due almost altogether to the increase in imports. Imports in 1910 amounted to the record-breaking total of $235,574,837, as compared with $179,690,125 in 1909. The excess of exports over imports in 1910 was $74,431,601, as compared with $128,641,704 in 1909.

Practically all countries shared, to a greater or less extent, in the general increase of imports into Brazil. The following table shows the distribution of the trade, by countries of origin, during 1909 and 1910:

| Countries. | 1909 | 1910 | Countries. | 1909 | 1910 |
|---|---|---|---|---|---|
| United Kingdom | $48,241,287 | $67,061,065 | Newfoundland | $2,008,641 | $2,707,328 |
| Germany | 28,007,001 | 37,455,530 | Switzerland | 1,963,169 | 2,911,669 |
| United States | 22,265,534 | 30,253,918 | Netherlands | 1,748,977 | 1,390,348 |
| France | 18,610,398 | 22,268,307 | Spain | 1,522,001 | 2,000,276 |
| Argentina | 17,922,587 | 20,133,472 | Norway | 1,504,933 | 1,976,849 |
| Portugal | 9,994,615 | 13,103,860 | Canada | 953,523 | 1,159,679 |
| Belgium | 7,280,007 | 10,655,097 | All other countriss | 3,771,013 | 5,545,012 |
| Uruguay | 6,294,057 | 6,102,206 | | | |
| Italy | 5,236,557 | 7,503,410 | Total | 179,690,125 | 235,574,837 |
| Austria-Hungary | 2,365,825 | 3,346,811 | | | |

The total exports in 1910 amounted to $310,006,438, as compared with $308,331,829 in 1909. The year's trade was carried on along lines which represented a considerable variation in its distribution, both as to ports of origin and countries of destination, in comparison with the general trend of the trade in 1909.

The accompanying table gives the distribution of export trade of Brazil, by countries of destination, for 1909 and 1910:

| Countries. | 1909 | 1910 | Countries. | 1909 | 1910 |
|---|---|---|---|---|---|
| United States | $123,817,298 | $112,184,068 | Uruguay | $5,203,043 | $5,672,471 |
| United Kingdom | 49,832,180 | 73,440,577 | Italy | 2,651,878 | 2,092,168 |
| Germany | 48,130,450 | 36,285,755 | Spain | 1,062,270 | 1,074,560 |
| France | 26,514,120 | 26,116,585 | Portugal | 905,968 | 834,068 |
| Netherlands | 14,390,172 | 15,289,064 | All other countries | 8,841,614 | 10,779,431 |
| Austria-Hungary | 10,261,295 | 9,007,954 | | | |
| Argentina | 10,229,459 | 11,618,104 | Total | 308,331,829 | 310,006,438 |
| Belgium | 6,492,082 | 5,611,633 | | | |

## LELAND STANFORD SCIENTIFIC EXPEDITION TO BRAZIL.

The scientific expedition organized by the Leland Stanford University to study the geology and natural history of the northern States of Brazil arrived at Para on May 3. The expedition is under the direction of Dr. J. C. Branner, who occupies the chair of geology at that institution, and includes Dr. Fred Baker, naturalist, and physician to the expedition; Dr. H. Heath, professor of zoology; Dr. E. C. Starks, ichthyologist; and William Mann, entomologist. George C. Branner, Olaf P. Jenkins, and Earl Leib, students of the university, accompany the expedition as assistants. The party propose to start from Natal, on board a vessel which they will freight for that purpose, and sail along the coast as far as the Oyapock River, studying the geological formation of the coast and collecting specimens of fish and other marine life of these waters. The investigations of the present expedition will supplement those made by Dr. Branner in 1899, when he sailed along the northern coast of Brazil from Caravellas, in the State of Bahia, as far as Natal, making investigations of the coral reefs and geological formation of that coast.

## WIRELESS SYSTEM.

The completion of the wireless system now in course of construction in Brazil will give that country the greatest wireless system in the world. Fifteen new stations are being erected along the Amazon and Paraguay Rivers by a wireless company, and are expected to be in operation within a year. Successful communications already have been made with a vessel lying at Buenos Aires, 1,000 miles south, with Amaraline, in Bahia, 750 miles north, and with two ocean steamers 500 miles at sea.

### SEASIDE RESORT AT GUARUJA.

A foreign syndicate recently acquired the bathing beach at Guaruja, in the vicinity of Santos, and proposes to build a large hotel, a casino, and amusements of all kinds, and to connect it with Santos by an electric tramway. The beach affords excellent bathing, and the syndicate plans to make it a fashionable health resort.

## CHILE

### SALARY OF PRESIDENT AND MEMBERS OF CABINET.

At the session of the Chilean Congress which opened on October 14, 1910, and adjourned on February 1, 1911, the salary of the President of the Republic of Chile was fixed at $60,000 Chilean currency[1] and that of each member of his cabinet at $24,000 Chilean currency.

### TREATY OF COMMERCE AND NAVIGATION WITH ITALY.

The minister of Chile in Berlin and the ambassador of Italy to Germany signed on July 28, 1898, in Berlin an ad referendum treaty of commerce and navigation between Chile and Italy. This treaty received the unanimous approval of the House of Deputies of Italy, but in Chile the treaty was referred to the committee on foreign relations of the Chilean Congress, which committee has recently recommended its adoption. The treaty extends the most-favored-nation clause to both countries in matters concerning commerce and navigation.

### SPECIAL PROPAGANDA COMMISSIONER TO EUROPE.

Sr. Benjamin Vicuña Subercaseaux, chief of the library and propaganda section of the department of foreign relations of Chile, has been commissioned for a period of six months to take charge of the propaganda publications of Chile in Europe. He will also study the organization of the archives of foreign relations in France and Spain.

### PROPOSED POSTAL CONVENTION WITH CANADA.

The Government of Chile is considering the negotiation of a postal convention with Canada.

### FREE ENTRY OF CHLORIDE OF PLATINUM.

The Government of Chile has provided for the free entry of chloride of platinum imported for industrial uses.

[1] Chilean currency, paper peso equivalent to approximately $0.215 United States gold.

## CONSULAR NOTES.

According to advices from ALFRED A. WINSLOW, the United States consul at Valparaiso, a west coast information agency has been organized in that city for the purpose of furnishing American exporters with general information such as names and addresses of firms, commercial ratings, etc. Peru and Bolivia will also be included in their work.

The first locomotive constructed in Chile for the Government railways was tested early in March and pronounced entirely satisfactory. It is estimated that the Chilean Government should have 66 new locomotives and 956 freight cars during 1911.

Engineers investigating mining properties in Chile report favorable openings for investment in copper mines.

## APPROPRIATION FOR ART SCHOOL AND INTERNATIONAL AGRICULTURAL EXPOSITION.

The Congress of the Republic of Chile has authorized the expenditure of $30,000 Chilean currency for the maintenance of the School of Arts and Crafts during the present year, and has appropriated $100,000 national currency for the completion of the works of the International Agricultural Exposition. The sum of $300,000 Chilean currency has likewise been set aside for the purchase of artistic works for the National Museum of Fine Arts.

## FUNDS FOR SANITARY SERVICE.

The Government has been authorized to expend $200,000 Chilean currency in the adoption of measures for the prevention of contagious and infectious diseases, and for other expenses incurred in connection with the maintenance of the sanitary service of the country.

## FUNDS FOR RAILWAY CONSTRUCTION AND EXPENDITURE.

The recent Chilean Congress authorized the expenditure of $10,000,000 Chilean currency in the survey and construction of railways in accordance with the budget of 1910, and in the acquirement of rolling stock for the same. Appropriations were also made for the following purposes: $6,907,277.75 Chilean currency for excess expenditures in the operation of railways; $600,000 Chilean gold[1] and $404,359.77 lean currency for the payment of bridge, station, siding, and itch work already contracted for and the construction of which can not be conveniently postponed.

## MISCELLANEOUS PUBLIC IMPROVEMENTS.

The sum of $100,000 Chilean currency has been placed at the disposal of the director of public works for the erection of water works to supply the city of Talca with potable water.

[1] Chilean gold—gold peso equivalent to approximately $0.365 United States gold.

Steps have been taken for the dredging of the Bio-Bio River, in the Province of Bio-Bio.

A meteorological station will soon be established by the Federal Government on the Island of Pascua.

The reconstruction of the Central Railway Station at Santiago, Chile, which was destroyed by fire a few months ago, is to cost $800,000 Chilean currency.

The Government of Chile has provided funds for the completion of the Cucharas viaduct on the Santiago to Valparaiso River.

The Federal Government will be petitioned by the citizens of Limache to complete the installation of water works for supplying that town with potable water.

### COMPLETION OF OSORNO TO PUERTO MONTT RAILWAY.

The construction of the Osorno to Puerto Montt Railway is rapidly nearing completion, and it is planned to open this road to public traffic in September of the pressent year. Ten bridges and 62 buildings have already been erected.

## COLOMBIA

### SPECIAL MISSION TO VENEZUELA.

The President of the Republic of Colombia has appointed Gen. Ramon Gonzales Valencia envoy extraordinary and minister plenipotentiary on special mission to represent Colombia at the centennial celebration of the Venezuelan independence. The minister will be accompanied by a secretary, a civil attaché, and a military attaché.

### OPENING OF THE FIRST AGRICULTURAL CONGRESS.

Under the presidency of the Chief Executive of the Republic, the formal opening of the First Agricultural Congress of Colombia, called by the Sociedad de Agricultores, took place at Bogota on the 16th of April, 1911. In response to the call, delegates from all sections of the country participated at the meeting, including a large number of very prominent agriculturists.

### LOAN FOR BARRANQUILLA.

The National Government of Colombia has authorized the municipal council of Barranquilla to raise a loan, not exceeding £30,000, for the construction of schoolhouses, public buildings, and for the pavement of streets of the city.

### NEW CUSTOMHOUSE.

The Government of Colombia has opened a new customhouse in the Lower Caqueta, at a point called Puerto Cordoba (La Padrera) Department of Cauca. All merchandise imported through this customhouse shall pay a duty of 15 per cent of its invoice value.

### FOREIGN TRADE IN 1910.

According to figures recently published by the director general of statistics of Colombia, the foreign commerce of the Republic during 1910 reached a total of $34,650,789.79 United States currency. The exports amounted to $17,625,152.74, and the imports to $17,025,637.05, making a favorable balance of trade of $599,515.69. These totals are distributed among the different customhouses as follows:

| | Exports. | | Imports. | |
|---|---|---|---|---|
| | Kilograms. | Value in gold. | Kilograms. | Value in gold. |
| Arauca | 46,852 | $83,068.22 | 45,266 | $23,801.72 |
| Barranquilla | 28,053,459 | 7,139,083.42 | 42,122,168 | 10,060,169.15 |
| Buenaventura | 3,192,435 | 1,153,523.00 | 6,622,022 | 1,278,380.65 |
| Cartagena | 30,408,861 | 5,178,441.63 | 29,333,862 | 3,977,477.94 |
| Cucuta | 5,303,377 | 861,918.20 | 2,570,609 | 518,271.79 |
| Ipiales | 659,191 | 84,272.85 | 402,024 | 45,030.20 |
| Orocue | 97,897 | 28,708.60 | 39,411 | 9,065.92 |
| Rio Hacha | 4,149,731 | 161,507.29 | 394,129 | 45,171.80 |
| Santa Marta | 99,433,244 | 1,770,067.96 | 11,122,577 | 97,721.59 |
| Tumaco | 2,761,364 | 1,164,561.57 | 5,446,426 | 970,546.29 |
| Totals | 174,106,411 | 17,625,152.74 | 98,098,494 | 17,025,637.05 |

### EXPLOITATION OF OIL FIELDS ON THE ATLANTIC COAST.

Press dispatches received from Colombia indicate the great success of the company exploiting the petroleum fields of Tubara district, Province of Barranquilla, now being rapidly developed. The company in reference is a Canadian corporation, organized in Toronto under the name of Atlantic Oil Co. (formerly the Colombian Oil & Gas Co.), with a capital of $4,000,000.

Four 10-inch wells have already been opened, and the engineers are now boring three more wells of 14-inch width. At Las Perdices, the location of the wells, a colony has been established, with 20 houses and a hospital for laborers.

The quality of the petroleum is excellent, and the product was awarded the first prize in the Centennial Exposition held at Bogota in July, 1910.

### GAS PLANT IN BARRANQUILLA.

The Municipal Council of Barranquilla, Colombia, has entered into a contract with Gen. Jorge Moya Vasquez, by the terms of which he is authorized to establish in the city a plant for the manufacture of gas for lighting and industrial purposes.

### COMPLETION OF ENVIGADO STATION ON THE AMAGA RAILROAD.

On April 15, 1911, the first station on the Amaga Railroad, at Envigado, Department of Antioquia, was formally inaugurated. The new depot is located at 8½ kilometers from Medellin.

## COSTA RICA

### MESSAGE OF THE PRESIDENT.

At the opening ordinary session of the present legislative period of the Constitutional Congress, on May 1, President Ricador Jimenez read his message covering the fiscal year, May 1, 1910, to April 30, 1911.

The report begins with a statement of the friendly relations existing between Costa Rica and the other powers of the world, and contains expressions of gratitude for the assistance rendered to the Republic during the earthquake of 1910 by the various nations. It also comments on the participation of the Government in the various congresses and celebrations of other countries. Reference is made to the peace and order prevailing within the country and to the old boundary question with Panama, which is nearing an amicable settlement.

With respect to the financial affairs of the country, the President reports that in 1910 the revenues yielded the sum of 8,121,725.99 colones, or an increase of 756,229 over 1909. In this connection the President points out that, as the revenues are a fair exponent of the condition of the general receipts, it is reasonable to affirm that the country is regaining its strength. The exports of 1909 were valued at a total of 17,583,348 colones, while in 1910 they reached the sum of 18,009,385 colones. The imports in 1910 amounted to 16,984,377 colones, which sum, according to President Jimenez, is the highest recorded in the commercial history of the country, exception being made, of course, of the 1891 imports, whose aggregate value was 17,954,650 colones.

The message then discusses the public improvements undertaken during the year and makes further recommendations along this line, while special comment is made on the progress of the Pacific Railroad.

The President requests the authorization of Congress to contract for a foreign investment of about £500,000, to be utilized in the construction of steel-frame dwellings in the Republic, these homes to be sold to the people on convenient terms.

Finally, mention is made of the creation of two new Cantons, those of Coronado and Acosta.

### MONUMENT TO LEON FERNANDEZ.

A monument erected to the memory of the eminent Costa Rican statesman, Señor LEON FERNANDEZ, was dedicated on April 11 last. It stands in a conspicuous section of the Parque Central at San Jose, and was executed by ADRIOTICO FROLI, of the Academy of Fine Arts of Carrara.

### COSTA RICANS IN MILITARY COLLEGE OF MEXICO.

The Government of Costa Rica has accepted the offer of two scholarships at the Military Academy of Mexico City, and has designated two young men to assume studies there.

### PROPOSED RAILROAD BETWEEN COCO BAY AND LIBERIA.

According to dispatches received from San Jose, an American capitalist has applied to the Government of Costa Rica for authority to construct an electric railway which, starting from Puerto del Coco, on the bay of the same name, shall continue as far as Liberia, and thence south to La Barranca.

## CUBA

### WITHDRAWAL OF REVOLUTION BONDS.

By decree of April 17, 1911, President GOMEZ, of the Republic of Cuba, has ordered the payment of the 732 outstanding bonds issued by the Revolutionary Government of 1896. The cancellation of these bonds shall be effected through the house of Speyer & Co., of New York City, from funds derived from the $16,500,000 loan. Payment is to begin on October 1, 1911, after which date the bonds will cease to draw interest.

### SPECIAL IMMIGRATION INSPECTOR.

On account of the enormous increase of immigration into the port of Habana, the President of the Republic of Cuba has issued a decree creating the position of special immigration inspector at that port, and has appointed Señor RUDOLFO DEL CASTILLO to the new post.

### QUARANTINE STATION AT CAYO DUAN.

With the completion of the quarantine station at Cayo Duan, work on which is progressing rapidly, Santiago de Cuba will have one of the finest quarters of its kind in the world. The new station is to cost $100,000, and Cayo Duan, an island located in the Bay of Santiago, is a most appropriate place. With the opening of the Panama

Canal, five years hence, Santiago de Cuba will be a great port of call for vessels passing to and from Europe, and Cuba is preparing for the great traffic.

### NEW INDUSTRIAL ESTABLISHMENTS.

A company has recently been organized in Cuba, under the name of "Alfarería de Vento," for the manufacture of bricks, tiles, and moldings. The brickyards will be located in Vento.

The International Brewing Co. (Compañía Cervecera International) is the name of a corporation recently organized in Cuba with a capitalization of $1,000,000 of which $250,000 have already been subscribed.

The Compañía Minera de Bayamo is the name of another Cuban company formed to exploit the extensive copper mines of Datil, near Bayamo.

### PROPOSED ZOOLOGICAL PARK FOR HABANA.

The Department of Public Works of the Republic of Cuba has just completed plans for turning the Quinta de los Molinos into a public park and zoological garden for the city of Habana. The general plan follows to a large extent the scheme of the Central Park of New York. The grounds here possess the most complete collection of tropical plants and botanical specimens in Cuba.

## DOMINICAN REPUBLIC

### ARBITRATION OF BOUNDARY QUESTION WITH HAITI.

The Governments of the Dominican Republic and of Haiti have agreed to submit their boundary controversy to the Arbitration Tribunal of The Hague. President CACERES of the Dominican Republic has therefore appointed the Hon. APOLINAR TEJERA, chief justice of the Republic, and Señor Don FRANCISCO J. PEYNADO, a distinguished Dominican lawyer, counselors to Señor Don EMILIO C. JOUBERT, the Dominican minister at Washington, who will preside over the negotiations.

### AGRICULTURAL SCHOOL IN SAN CRISTOBAL.

The School of Agriculture for the Southern Department of the Dominican Republic, located in the city of San Cristobal, was officially inaugurated on April 1, 1911. Señor Don RAFAEL DIAZ, secretary of agriculture and immigration, presided over the ceremonies, which were attended by a large and distinguished gathering.

### RAILROAD BETWEEN SANTO DOMINGO AND EL CIBAO.

Press dispatches from Santo Domingo, the capital of the Dominican Republic, advise that the railroad line between that city and El Cibao will soon be an accomplished fact. The contractors of the Sanchez-La Vega Railroad, who will also construct this line, have agreed to the Government's suggestion to commence the work of construction within the shortest possible time. The works will begin simultaneously at Santo Domingo and at La Gina, near San Francisco de Macoris, and will proceed as far as Antonsi, thus establishing the much-desired communication between the capital and El Cibao.

## ECUADOR

### NEW FISCAL OFFICE UNDER DEPARTMENT OF FINANCE.

On March 15, 1911, President ALFARO promulgated a law establishing a special section, annexed to the department of finance, under the name of "Contabilidad Fiscalizadora de Nuevos Impuestos," for the purpose of keeping the accounts of new taxes collected.

### INVITATION TO SANITARY CONVENTION OF PARIS.

The Government of Ecuador has been invited to participate in the Sanitary Convention of Paris, to be held in Paris, France, on October 10, 1911, for the purpose of studying the manner of preventing the spread of contagious diseases, and the discussion of sanitary measures in general.

### COMPETITIVE PLANS FOR NEW HOSPITAL IN QUITO.

The Board of Public Charities of Quito has requested plans for the construction of a new hospital in the capital of the Republic, to cost $150,000. The successful architect will receive a compensation for his plans.

### MONUMENT TO FRENCH SCIENTISTS.

On April 16, 1911, President ALFARO laid the cornerstone, in Quito, of the monument intended to perpetuate the memory of the work done by French scientists in the measurement of the arc of the meridian in the eighteenth century, and also the work of the French Geodetic Commission from 1899 to 1906. The unveiling of the monument will take place on July 14 of the present year.

A tablet has also been unveiled in the house in which the Geodetic Commission was first located at Quito. This tablet bears the following inscription: "The French academicians commenced here the astronomic investigations for the measurement of the arc of the meridian. 1736. The French-Ecuadorian Committee. 1911."

### COTTON SEED FOR EASTERN ECUADOR.

The Government of Ecuador has instructed its consul at Paita, Peru, to secure cotton seed of the best class of cotton raised in that locality for distribution to plantation owners and agriculturists in Ecuador. A large area in eastern Ecuador is said to be particularly adapted to cotton cultivation, and much interest is now being shown in the introduction of this useful fibrous plant in that section of the country.

### POTABLE WATER SUPPLY FOR BAHIA.

The supply of potable water to the city of Bahia de Caraquez, one of the most important ports of Ecuador, by means of artesian wells, has not been entirely successful, and the contract with a French capitalist to furnish the city with water by means of a condensation plant has expired without any work having been done on the project. The city is, therefore, now open for another proposal to supply water, and it is reported that the municipal council is inclined to make exceedingly favorable terms to some reliable company for the installation of an adequate potable water supply for the municipality.

## GUATEMALA

### GENERAL AMNESTY.

A decree of the Legislative Assembly of the Republic, approved on April 26, 1911, and promulgated by President Cabrera on the following day, grants a general amnesty to nearly all persons at present within the jurisdiction of the law.

### IMPORTANT MINING CONCESSION.

The Pan American Union has recently received the issue of El Guatemalteco, the official organ of the Guatemalan Government, dated April 21, 1911, containing the documents relative to the important concession recently granted to the Guatemala Mining & Development Co., with which Mr. Archibald E. Spriggs is prominently identified.

### MONUMENT TO BARRUNDIA.

The legislative assembly has passed a decree providing for a monument to the memory of the patriot and hero of Central American independence, J. Francisco Barrundia, to be erected over his grave in the General Cemetery, city of Guatemala. The President is authorized to invite competition for the design.

# HAITI

### OPENING OF THE TWENTY-SEVENTH CONGRESS.

On May 10, 1911, the first session of the Twenty-seventh Congress was officially opened in the presence of the President of the Republic, members of the diplomatic corps, public officials, and prominent citizens. The president of the Senate, Mr. F. P. PAULIN, delivered the opening address, after which President ANTOINE F. C. SIMON read his annual message.

### HAITI AT UNIVERSAL CONGRESS OF RACES.

An invitation has been extended to the Haitian Government, through the intermediary of the British foreign office, to participate in the Universal Congress of Races, to be held at London during July.

### CELEBRATION OF THE THIRD PRESIDENTIAL ANNIVERSARY.

On May 15 the third anniversary of the presidential term of Gen. SIMON was celebrated throughout the Republic with great éclat. A reception was held at the presidential palace, Port au Prince, which was attended by all the high officials of the Government and representatives of the foreign powers. Many prominent citizens at the capital called to pay their respects to the President on this auspicious occasion.

# HONDURAS

### REPORT OF SECRETARY OF PROMOTION.

The Pan American Union has just received a copy of the comprehensive annual report submitted by the secretary of promotion and public works of Honduras to the National Congress on February 2, 1911. The document is an official review of the departments under its jurisdiction for the fiscal year ending July 31, 1910, and contains a detailed statement of the progress made in each division during that period. Among the various branches treated in detail are the postal service, telegraph and telephones, means of communication, the national mint, mining developments, and a special review is also given of the agricultural and cattle raising possibilities in the Republic.

### FOREIGN TRADE, 1910.

In his annual report on Honduras, the United States consul at Tegucigalpa, ARMINIUS T. HAEBERLE, gives the following figures, obtained from the minister of finance, on the foreign trade for 1910: The sum total of exports, according to this source, is $2,472,996, an increase of $482,395 over last year. The imports amounted to $2,695,907, or $114,365 over last year.

## MEXICO

### TRANSMISSION OF THE EXECUTIVE POWER.

On May 25, 1911, Gen. PORFIRIO DIAZ and Sr. RAMON CORRAL, tendered their resignations as President and Vice President of the Republic, respectively, to the Federal Congress of Mexico. The Congress then appointed the Minister for Foreign Affairs, Sr. FRANCISCO LEON DE LA BARRA, former Mexican Ambassador at Washington, Provisional President until such time as a general election may take place.

President DE LA BARRA has organized his Cabinet in the following manner:

Acting Minister for Foreign Affairs, the sub-secretary of this department, Sr. BARTOLOME CARVAJAL Y ROJAS; Minister of the Interior, Sr. EMILIO VASQUEZ GOMEZ; Minister of Finance and Public Credit, Sr. ERNESTO MADERO; Minister of Justice, Sr. RAFAEL HERNANDEZ MADERO; Minister of Public Instruction and Fine Arts, Dr. FRANCISCO VASQUEZ GOMEZ; Minister of Promotion, Sr. MANUEL CALERO; Minister of War and Navy, Gen. EUGENIO RASCON; Minister of Communications and Public Works, Sr. MANUEL BONILLA.

### ARBITRATION CONVENTION WITH FRANCE.

Under date of May 10, 1911, the President signed the decree sanctioning the convention entered into with France, by the terms of which both countries agree to request His Majesty VICTOR EMMANUEL III, King of Italy, to act as arbitrator in the pending dispute as to the sovereignty over Clipperton Island.

This convention was signed in Mexico City on March 2, 1909; approved by the Senate of Mexico on October 11, of the same year; ratified by President DIAZ on May 1, 1911; approved by the French Chambers and ratified by President FALLIERES on February 23, 1911, and the ratifications exchanged in Mexico on May 9 last.

### PROGRESS IN MEXICAN MINING.

The Pan American Union is in receipt of a copy of "Informes y Memorias," issued by the Mexican Institute of Mines and Metallurgy, 1910–11, in which appears a most interesting article, in both Spanish and English, entitled, "Progress in Mexican Mining and Metallurgical Methods during the Century of Independence." This is a paper read by Mr. A. GROTHE at the meeting of the "Concurso Cientifico y Aristico del Centenario," on February 25, 1911, and has attracted considerable notice.

### EXPORTS FROM TAMPICO, FIRST QUARTER, 1911.

CLARENCE A. MILLER, the United States Consul at Tampico, advises that the declared exports from the Tampico consular district to the United States, for the quarter ending March 31, 1911, were as follows:

| | |
|---|---|
| Animal products | $31,252 |
| Vegetable products | 63,050 |
| Miscellaneous | 494 |
| Total | 94,796 |

## NICARAGUA

### NEW PRESIDENT AND CABINET.

Following the resignation of President JUAN J. ESTRADA, on May 11, 1911, the position of executive of the Republic was assumed by Sr. ADOLFO DIAZ, who reorganized the cabinet as follows:

Minister of the Interior, Dr. JOAQUIN GOMEZ; Minister of War and Marine, Gen. LUIS MENA; Minister for Foreign Affairs, Sr. TOMAS MARTINEZ; Minister of Finance, Sr. EULOGIO CUADRA; Minister of Promotion, Sr. ALEJANDRO CETON.

### NEW ISSUE OF PAPER CURRENCY.

The President of the Republic has authorized a new issue of 15,000,000 paper pesos to replace the old issue as well as the provisional notes of former administrations now in circulation.

### TREATY WITH THE UNITED STATES.

On June 6, 1911, the Hon. PHILANDER C. KNOX, Secretary of State of the United States, and Sr. Dr. SALVADOR CASTRILLO, Envoy Extraordinary and Minister Plenipotentiary of Nicaragua, signed a treaty providing for the refunding of the foreign debt, and for the

development of the country, through a loan to be furnished Nicaragua by United States capitalists. This treaty is along the same lines as the convention now before the United States Senate for the conversion of the Honduran debt.

### PROPOSED INTEROCEANIC RAILROAD.

Reports from Bluefields, Nicaragua, indicate that preliminary work on the construction of the railroad from the Atlantic coast into the interior of the country, has already been commenced. The proposed line will run from Bluefields to Rama by way of the Escondido River, and from Rama to San Ubaldo, a port on the Great Lake. It is also proposed to open up the Escondido River for general navigation.

## PANAMA

### IMPORTS AT PANAMA CITY, 1910.

According to statistics published by the Inspector of the Port of Panama, Republic of Panama, the imports into that city during the year 1910 were valued at $4,927,290.80, on which were paid customs revenues amounting to $816,344.85.

### DISTRIBUTION OF AGRICULTURAL MACHINERY.

The "Gaceta Oficial" of Panama for April 22, 1911, publishes the text of President Arosemena's decree providing that all farmers who wish to avail themselves of the benefits of law 21 of 1908, for the acquisition of agricultural implements and machinery, shall address a petition to the mayor of their respective districts, stating the kind and number of implements or machinery they desire. This application shall, in turn, be referred by the mayor directly to the Secretary of Promotion, whose action shall be made known to the applicant through the same medium. Farmers thus securing these implements shall bind themselves to keep the Department of Promotion informed as to the practical results obtained by their use. They must also pay for these tools within three years from the date of delivery and reimburse the Government for such expenses as it may have incurred in the transportation of same.

### NEW SUGAR PLANTATION AT COLON.

A consular advice from Alban G. Snyder, the United States Consul General at Panama City, states that the Government has entered

into a contract with a representative of the Panama Developing & Manufacturing Co., for the establishment of a sugar plantation and factory in the Province of Colon, on waste lands of the Republic already granted and others which may be granted.

### DUTY ON COMMERCIAL ADVERTISEMENTS.

By decree of President Arosemena of April 10, 1911, imported printed matter, which from its character may be used as commercial advertisements, is subject to a duty of 12½ per cent ad valorem. This decree was issued in response to the request of the customs administrator of Colon, asking for an interpretation of article 1 of the law of January 11, 1911, by which commercial advertisements were subjected to a duty of 40 per cent ad valorem. In the decree first above mentioned, the President finds that article 1 of the law of January 11 is in contravention of the treaty with the United States, and in consequence thereof the rate is established at 12½ per cent ad valorem.

## PARAGUAY

### RAILWAY COMMUNICATION WITH ARGENTINA.

The unfinished section of the Central Paraguayan Railway, between Pirapo and Villa Encarnacion, has been completed, and railway traffic is possible now from Asuncion, the capital of the Republic, to Villa Encarnacion, Paraguay, on the Upper Parana River opposite Posadas, in the Argentine Republic. Transfers will be made at the terminal stations of the Paraguayan and Argentine railway systems at Encarnacion and Posadas, respectively, by ferryboat.

This enables the journey from Asuncion to Buenos Aires, or vice versa, to be made in from 30 to 35 hours. The trip from Buenos Aires to Asuncion, over the new line, takes the traveler northward through the delta of the Parana River to Ibicuy; from here through the richest agricultural section of the Province of Entre Rios, Argentine Republic; thence to Concordia and Santo Tome, on the Uruguay River, and up to Posadas. Here the Upper Parana River is crossed by ferryboat landing passengers at Encarnacion, Paraguay, and from this point by rail to Asuncion, a distance of 234 miles.

The Central Paraguay Railway propose to build 120 kilometers of new branches, one to Carapegua and another to Villeta, both situated in important agricultural sections of Paraguay.

# PERU

## COMMERCIAL AND INDUSTRIAL PROPAGANDA ABROAD.

The President of Peru has resolved to establish a European bureau of information, industrial and commercial propaganda, with headquarters at Paris. This bureau will be in charge of a special immigration agent who shall, whenever necessary, visit the principal capitals of Europe. Among the duties of this bureau will be the following: To issue propaganda publications; to maintain a reading room for the public; to facilitate the registration of trade-marks and the acquisition of patents of inventions; to supervise the Government students in Europe; to send to the Minister of Promotion of the Republic data and publications which it may deem of interest; to report to the same official on the participation of Peru in international industrial expositions and congresses; and to submit an annual report of its transactions.

## DEVELOPMENT OF MOUNTAIN LANDS.

A recent decree of the President of Peru reduces the amount of deposit required by regulation for the exploitation of mountain lands to 10 cents per hectare.

## COINAGE OF MONEY IN 1910.

The National Mint of the Republic of Peru coined during the year 1910 the amount of 52,859 Peruvian gold pounds, in units and fifths, as follows:

| | Libras peruanas, |
|---|---|
| 47,076 pounds | 47,076 |
| 28,915 fifth-pounds | 5,783 |
| Total | 52,859 |

## CUSTOMS REVENUES, FIRST QUARTER OF 1911.

During the first three months of 1911 the net revenues of the maritime customhouses of Peru amounted to 279,921–417 Peruvian pounds, as compared with 226,501–064 Peruvian pounds for the same period of 1910, an increase of 53,420–353 pounds in 1911. This total is distributed among the various customhouses as follows:

| | 1910 | 1911 |
|---|---|---|
| | *Libras peruanas.* | *Libras peruanas.* |
| Paita | 10,363–571 | 15,418–566 |
| Eten | 6,426–443 | 9,350–420 |
| Pascamayo | 4,255–922 | 5,452–338 |
| Salaverry | 8,156–387 | 9,016–713 |
| Callao | 154,410–323 | 186,261–012 |
| Pisco | 5,188–273 | 5,970–315 |
| Mollendo | 35,551–368 | 45,899–695 |
| Ilo | 1,948–777 | 2,522–358 |
| Total | 226,501–064 | 279,921–417 |

The river port of Iquitos collected during the month of January, 1911, the sum of 15,519–509 Peruvian pounds, as compared with 10,431–394 during the same month of 1910.

## THE BANKS OF LIMA ON DECEMBER 31, 1910.

The balance of commercial accounts and deposits at the different banking institutions of Lima on December 31, 1910, shows an increase of 1,285,980–755 Peruvian pounds over the balance of 1909, as detailed in the following table:

| | Libras peruanas. |
|---|---|
| London and Peru Bank | 2,546,172–708 |
| Italian Bank | 628,717–889 |
| International Bank | 172,519–923 |
| Popular Bank | 334,945–106 |
| Transatlantic German Bank | 1,281,458–482 |
| Savings Bank (Caja de Ahorros) | 457,995–669 |
| Bank of Deposits and Consignments | 208,815–491 |
| Total | 5,630,625–268 |

The profits of these institutions during 1910, according to available reports, were as follows:

| | 1909 | 1910 |
|---|---|---|
| | *Libras peruanas.* | *Libras peruanas.* |
| London and Peru Bank | 74,781 | 75,682 |
| Italian Bank | 19,289 | 20,500 |
| International Bank | 7,555 | 9,040 |
| Popular Bank | 17,976 | 18,841 |
| Savings Bank | 5,417 | 4,335 |
| Bank of Deposits and Consignments | 14,701 | 14,399 |

## ELECTRIC LIGHT FOR CUZCO.

The city of Cuzco, Peru, will soon be equipped with an up-to-date plant for the generation of electric light and power. The preliminary surveys for its establishment have been successfully completed, and the work of construction is advancing rapidly.

## EXPORT DUTY ON RUBBER AND LIKE GUMS.

The President of Peru on May 10, 1911, signed and promulgated an Act of the National Congress passed on the 21st day of December, 1910, by which the export duty on rubber and like gums shall be 8 per cent ad valorem, calculated upon the Liverpool price of the gum. Payment of this tax may be made in drafts on London, Paris, or New York, at not longer than ninety days after sight, at the price on the day of export.

# SALVADOR

## ELECTION OF DESIGNATES.

The National Legislative Assembly of Salvador, by authority of article 68 of the Constitution, has elected Sr. Carlos Melendez, Dr. Fernando Lopez, and Gen. Juan Amaya, First, Second, and Third Designates, respectively, to succeed to the presidency of the Republic, in case of vacancy during the present term.

## REPEAL OF TAX EXEMPTIONS OR REBATES.

The National Legislative Assembly of El Salvador, on April 19, 1911, passed a decree declaring unconstitutional, and null and void, all privileges, concessions, or rebates of duties or fiscal taxes which may be granted to individuals or corporations by way of protection to industry. Officials or authorities issuing such grants in violation of the decree shall be liable to punishment.

Privileges, concessions, or franchises granted by virtue of bilateral contract must be canceled by agreement with the concessionaires. To this end the Executive is authorized to effect compromises within three months from the date of the decree. If at the expiration of this term no agreement has been reached, the Executive shall annul the respective concessions.

All exemptions or reductions of duty established by the tariff of customs valuations are also repealed, except in cases when a new industry is introduced for the first time, or when one already established is to be improved.

All individuals and corporations affected by the decree shall, therefore, at the expiration of three months from the date of the decree pay the full rate of duty or tax prescribed by the tariff in force.

## INFORMATION BUREAU IN SALVADOR.

A consular advice from Harold D. Clum, the United States Consul General at San Salvador, states that American manufacturers and exporters who may desire to bring their goods to the attention of the Government of Salvador should note that the Salvador Congress authorized, and the Ministry of Agriculture now maintains, an information bureau to report upon the orders which the various departments of the Government may consider placing either abroad or in home markets. The law provides that Government orders shall be placed only after, and presumably upon the basis of, a report from this bureau of information. It is therefore to the advantage of American manufacturers and others desiring to market goods in

which the Government might be interested to send their catalogues, price lists, and proposals to the bureau in question. The bureau desires to receive such catalogues and communications, which should be addressed to the "Oficina de Información, Ministerio de Agricultura, San Salvador."

### DUTIES OF THE NEW DEPARTMENT OF AGRICULTURE.

The National Legislative Assembly of the Republic of Salvador has prescribed, by law, the duties and functions of the Department of Agriculture recently created by President Araujo, as follows: Supreme supervision and inspection of municipal and interdepartmental roads; establishment of produce exchanges; taking of general agricultural census; collection of taxes on agricultural products; regulation of irrigation of lands; importation of new machinery for the cultivation and improvement of agricultural products; establishment of fertilizer factories; analysis of lands; development of commerce in general; and establishment of an information bureau.

### CREATION OF NEW CONSULATES IN SOUTH AMERICA.

For the purpose of promoting closer commercial relations with its sister Republics, the National Legislative Assembly of Salvador has created consulates general de carriere at Buenos Aires, for the Argentine Republic; at Rio Janeiro, for Brazil; and at Santiago, for Chile. Consulatès de carriere are also established at Bogota, Lima, and Caracas.

### CENTRAL AMERICAN MEDICAL CONGRESS.

President Araujo, of Salvador, in compliance with suggestions from eminent scientists of the country, has issued the call for a Central American Medical Congress, to be held in the city of San Salvador during the month of November, 1911, in commemoration of the hundredth anniversary of the declaration of independence. The Congress will hold two general sessions, the opening one November 3 and the closing November 7.

All Central American Governments have been invited to participate, and physicians, pharmacists, dentists, chemists, and naturalists residing in Central America will also be invited to attend.

### THE PUBLIC DEBT.

According to official data, the public debt of the Republic of Salvador on December 31, 1910, was $10,666,584.35 gold and $6,207,059.80 silver. Reduced to the silver unit, the total debt amounted to $32,873,520.67 silver.

### WIRELESS STATIONS.

The Government of Salvador is at present erecting two wireless stations, one at Planes de Renderos, near San Salvador, and another at the port of La Libertad. With the completion of these stations wireless communication between the capital and all the ports of the Republic will have been established.

## UNITED STATES

### MINE FIRES.

The Pan-American Union is in receipt of an interesting paper entitled "Mine Fires," issued by the Bureau of Mines, at Washington, D. C. This is a reprint of a lecture delivered by HERBERT M. WILSON, Chief Engineer of the Bureau of Mines, before the National Fire Protection Association at its annual meeting in New York, May 25. The subject is of interest at this time, as special investigations are being conducted in an effort to learn the best possible means of preventing and combating this great menace to life and property.

### NATIONAL EDUCATIONAL CONVENTION.

The preliminary announcement and official program bulletin of the Forty-ninth Annual Convention of the National Education Association of the United States have been received by the Pan-American Union. The gathering will meet at San Francisco, California, July 8–14, 1911. Leading educators of the country are scheduled to address the convention on various phases of school and academic life, and all indications point to a most important and interesting convention.

## URUGUAY

### CONSULAR BULLETINS TO BE ISSUED.

From the United States Consul at Montevideo comes the information that the Minister of Foreign Affairs has favorably passed upon the plan to publish a "Bulletin" in which will appear the reports of the diplomatic and consular officers of Uruguay abroad. This document will be distributed gratuitously in foreign countries, and will, in its scope, be similar to the United States "Consular and Trade Reports."

### PROPOSED IMPROVEMENTS AT MONTEVIDEO.

A bill has been introduced into Congress authorizing the President of Uruguay to expend $3,700,000 in public improvements at Montevideo. The principal items of construction are as follows:

| | |
|---|---|
| Building for port authorities | $100,000 |
| Passenger pavilion | 200,000 |
| Warehouses | 1,120,000 |
| Sheds | 291,800 |
| Cranes | 463,600 |
| Water installation | 10,000 |
| Power and lighting plant | 115,000 |
| Railways | 261,000 |
| Fencing, shed, and protective works | 167,000 |
| Railway supplies, rolling stock, etc | 100,000 |
| Conduits and sanitary installation | 92,000 |
| Fire protection and shed for inflammables | 246,000 |
| Dock, dredging and bridging the Pantanoso stream | 100,000 |

Bids will be requested for the construction of a greater part of these works. The water service, supply of electric light and power, railway lines, and the fire and sanitary installations may be contracted for direct. Payment will be made out of the Port Works funds and from the proceeds of a loan to be made with the Bank of the Republic.

### PROPOSED MUNICIPAL LOAN.

The proposed municipal loan of the city of Montevideo authorizes the President of Uruguay to borrow $15,000,000 to be used for public improvements. The project requires the approval of the municipal board, the Government, and Congress.

### TO STUDY EDUCATIONAL METHODS IN THE UNITED STATES.

A report from the former United States minister to Uruguay states that Senor ALFREDO SAMONATI, inspector of schools in the Department of Rocha, sailed recently for the United States in order to investigate manual and industrial education in the primary and secondary schools of the United States and Canada. He will also inquire into the matter of school furniture and equipment.

### MONTEVIDEO WATERWORKS IN 1910.

The gross receipts of the Montevideo waterworks in 1910 were £151,749, or an increase of £16,169 over the gross receipts of the previous year. The operating expenses for the same period were £45,448, which is £3,116 more than those of the previous year. The net receipts accordingly totaled £106,300, or an increase of £13,053 over those of 1909.

Two sand filters were inaugurated in 1910, and two more are to be added to the plant in 1911. The pumping plant will also be enlarged,

and a new engine, already ordered, will be in operation before the close of the present year.

A proposition is to be considered for a £1,000,000 increase in the capital stock of the company.

### PLAN FOR CANALIZATION OF THE RIO NEGRO.

The Government of Uruguay has resolved to obtain, through its legation at Washington, several expert hydrographic engineers to prepare competitive plans for the canalization of the Rio Negro and possibly of other Uruguayan rivers.

### PROVISIONING OF MERCHANT VESSELS AT MONTEVIDEO.

The department of finance has issued regulations permitting merchant vessels to provision themselves at Montevideo with the following bonded merchandise, free of duties, when such vessels are destined to foreign ports or to ports of the rivers Plate and Parana, without touching at Uruguayan ports: Provisions, drinks, naval stores, including canvas for sails and awnings, tarpaulins, paint, machin eoil, chains, anchors, and other merchandise of a similar nature and employment, and coal. This applies to vessels of 500 tons burthen and over.

Vessels not making cargo operations are not obliged to open register or leave to load, if only taking in provisions.

The director of customs shall prepare regulations governing the maximum quantity vessels may take as provisions, determined in accordance with the length of the voyage and the number of the passengers and crew.

### CONSTRUCTION OF TWO IMPORTANT BRIDGES.

According to Frederic W. Goding, the United States consul at Montevideo, the Government of Uruguay contemplates building two large bridges, one at the Pantonoso, at the northern side of the bay of Montevideo, and the other over the Santa Lucia River.

### PASANDU TO RIVERA RAILWAY.

Arrangements are being completed to enable the construction, at an early date, of a narrow-gauge railway from Pasandu to Rivera.

## VENEZUELA

### STEAMSHIP DEVELOPMENTS.

The United States consul at La Guaira, Isaac A. Manning, reports that the Royal Mail Steamship Co. has inaugurated an intercolonial steamship service between Port of Spain, island of Trinidad, British West Indies, and Carupano, La Guaira, and Puerto Cabello, connecting with the Royal Mail direct line at Port of Spain.

He also advises that the Government of Venezuela has granted an extension of six months in which the steamship service between Cano Colorado and Cristobal Colon on the east coast of Venezuela must be completed by the contracting party.

### MESSAGE OF THE PRESIDENT.

In pursuance of the constitutional provision Gen. JUAN VICENTE GOMEZ, President of the United States of Venezuela, read his annual message before the Congress of the Republic on May 10, 1911. A detailed account of his executive acts during the first year of his administrative term, beginning June 3, 1910, is contained therein.

Reviewing the work of the Department of the Interior, the message states that the navigation companies of Lake Maracaibo and of the Orinoco River and its affluents have merged into one corporation, to which consolidation is due the remarkable development in the maritime and river traffic of that region. Thanks to the active and efficient measures enforced by the Government, the spasmodic cases of bubonic plague in the capital did not attain the proportions of an epidemic. The Government has adopted the sanitary and quarantine regulations approved by the Convention of Governments of the British Colonies in the Caribbean; it has properly organized the sanitary service of the Federal District; is now engaged in establishing similar services in all ports of the Republic; and, in order to meet the expenditures of the health service, it has levied an additional tax on imports. The work on the physical and political map of Venezuela was carried on with great activity, and the printing thereof has already commenced.

Reporting upon the work of the Department for Foreign Affairs, the President takes pleasure in announcing that the Republic continues in perfect harmony with the nations of the world, and that if the relations with France and the Netherlands have not as yet been reestablished, this has not been due to Venezuela or its Government. When the new administration was inaugurated in the latter part of 1908, assurance was given to the German Minister at Caracas, who offered his friendly mediation between Venezuela and those countries, that the Venezuelan Government would attend justly and equitably to all pending questions in accordance with certain basis, to which President GOMEZ states Venezuela has strictly adhered, but when an adjustment was most anxiously expected the French and the Dutch Governments made new demands that were entirely unlooked for.

Regarding the relations with Colombia, President GOMEZ reports that the plenipotentiaries of both countries have been actively engaged in negotiating the settlement of questions of more than 80 years' standing and connected with boundaries, commerce, and navigation.

The treaty of commerce with Cuba is still pending. The extradition treaty with that Republic was signed and has already been approved by the Cuban Senate. The President expresses the hope that it will meet with the approval of the Venezuelan Congress. The Republic of Ecuador has accredited Gen. JULIO ANDRADE as Envoy Extraordinary and Minister Plenipotentiary at Caracas, and he was officially received in due time. The balance that Venezuela owes Spain for acts committed in the war of independence is still unsettled, although the Republic is regularly fulfilling its obligations with that nation. The President expects that the negotiations on the subject will soon be resumed and that Spain will accept Venezuela's proposition in a spirit of justice.

Dealing with the relations between the United States and Venezuela General GOMEZ says:

> In spite of the cordial and ever increasing relations with the United States of America it was impossible to accede to the insinuation of that Government concerning the establishment of an American consular agency at Guanoco, our laws not permitting consulates at ports that are not open to trade. This impediment was explained to the representative of that friendly nation, who unhesitatingly acknowledged the justification of our action.
>
> If that prohibition had not existed it would have been most pleasant for me to comply with the request, because I entertain the highest esteem toward the great North American Nation. The United States, occupying the foremost position in the continent and exercising in it the commercial and political hegemony, has never been responsible for conflicts in Venezuela, nor has it ever boasted of its omnipotence to impose upon us arbitrariness or injustice. On the contrary, it has intervened where foreign powers were concerned insisting upon the recognition of our rights. We have received no offense from it, but proofs of sympathy. I realize that the great nation aims to enlarge the already vast field which its products occupy in our markets, and I think that such aspiration is natural; but my patriotism does not harbor the slightest fear of its strength, because I see that its actions are based upon the serenity of its principles, which render it the most complete and least imperfect democracy the world has ever produced.

As a proof of this friendly feeling, President GOMEZ further states that when his administration was inaugurated he immediately undertook the settlement of the pending diplomatic questions. After long and elaborate conferences between his Foreign Office and the Special Representative of the United States an adjustment was reached satisfactory to both countries and in accordance with the law of nations. All claims were settled by compromise, except the case of the Orinoco Steamship Company, which was submitted to The Hague Tribunal. That court reversed the decision of Umpire BARGES and ordered Venezuela to pay $46,867.42, which sum the Government has already paid, although it does not consider that the award was rendered in accordance with justice.

The United States has accredited a new Minister in Venezuela, Hon. JOHN W. GARRETT, who has been officially received.

With respect to relations with the Government of His Britannic Majesty, they have been maintained in a similar spirit of harmony. The only question still pending is that concerning the abolition of the 30-per-cent surtax which Venezuela imposes upon imports from the British West Indies. The message expresses the earnest hope of the Venezuelans that an understanding be reached by which the interests of both countries may be harmonized. Mention is also made of the reception of the new British Minister at Caracas, Hon. FREDERICK D. HARTFORD.

Reference is made to the suggestion of President ALFARO, of Ecuador, that the President of Venezuela invite the Republics that formerly constituted the Great Colombia to become parties to a confederation, for which purpose representatives should meet at Caracas during the centennial celebration. The idea was enthusiastically received by President GOMEZ, who broadened the scope so as to include all the Republics liberated by BOLIVAR. The invitation to the Bolivar Memorial Congress has been accepted with great enthusiasm by the Republics which will participate in it, namely, Bolivia, Colombia, Ecuador, and Peru, besides Venezuela.

Discussing the Department of Finance and Public Credit, the Chief Executive shows himself extremely gratified upon announcing that the situation of the national exchequer is highly satisfactory, in the accomplishment of which result a persevering policy of economy and severe management has been exclusively instrumental.

During the fiscal year 1909–10 a total of 12,704,782.63 bolivars was paid for the service of the debts and other recognized claims. From June, 1910, to April 15 last the sum paid on the same account was 10,144,676.07 bolivars, distributed as follows:

| | Bolivars. |
|---|---|
| Diplomatic debt of 3 per cent, issue of 1905 | 4,106,716.65 |
| Debts under diplomatic agreements, of 3 per cent | 570,924.21 |
| Consolidated internal national debt of 3 per cent | 1,559,943.12 |
| Washington protocols | 2,981,950.99 |
| Crichfield claim | 318,034.25 |
| Manoa claim | 258,930.85 |
| Orinoco Steamship Co. claim | 348,176.00 |
| Total | 10,144,676.07 |

On March 31, 1911, the total debt of the Republic amounted to 187,761,285.86 bolivars, distributed as follows:

| | Bolivars. |
|---|---|
| Diplomatic debt of 3 per cent, issue of 1905 | 113,307,355.00 |
| Debts under diplomatic agreements, with sinking fund | 4,970,347.43 |
| Debts under diplomatic agreement, without sinking fund | 5,733,490.26 |
| 3 per cent national consolidated debt | 61,565,967.09 |
| Internal consolidated debt, without interest | 2,184,126.08 |
| Total | 187,761,285.86 |

With reference to the Department of War and Marine, the message reports that the Military Academy was inaugurated on July 5, 1910; that the Nautical School created by law of June 20, 1910, is operating with flattering success; that the progress of Puerto Cabello is remarkable; that a steel dock is being constructed at that port, and that the usefulness of the navy yard, also in Puerto Cabello, has been shown by the construction of the revenue-cutter "*29 De Enero.*"

Regarding agriculture, under the Department of Promotion, the President states that the Government has purchased the race track in Caracas belonging to the "Jockey Club Venezolano," and the grounds will be arranged for holding periodical agricultural and pastoral fairs. A seed and plant station has been organized, and the Government has engaged the services of an agricultural engineer for the purpose of establishing at Caracas a model farm where Venezuelans may study scientific and modern farming.

During the period under review the Department entered into 12 contracts of public interest, issued 8 title deeds to mines, 14 patents of invention, 101 trade marks, and 15 trade names; that the mining taxes collected during the same lapse of time amounted to 11,799.28 bolivars; and that the "Anuario Estadistico" (Statistical Year Book), for 1908 was published.

As to the postal service, the message sets forth the following facts as a proof of its efficiency: There are in the Republic 280 post offices; the postal division of the country into circuits has given very good results; the international service is carried on with regularity; during the present year all accounts with other countries of the Universal Postal Union have been canceled; the Republic participated in the South American Postal Congress of Montevideo; the proposed parcel-post conventions with Great Britain and Panama are now under consideration; the centennial postage stamp was issued to the public on July 4, 1910, and another issue of the same stamp was ordered in November last.

According to the message, the telegraph service of the Republic is excellent, having attained a high degree of development. The lines have been extended considerably; new material has been purchased in large quantities, and several private lines have been improved.

Dealing with the Department of Public Works, the President remarks that the construction, improvement, and maintenance of roads is the most urgent of all public works. In view of this position, the decree of June 24, 1910, was enacted, directing the department to consider a scientific and systematic plan which will afford the most advantageous results. Meanwhile work has been started on several roads.

During the year 1910 the following amounts have been spent in public works:

| | Bolivars. |
|---|---|
| Highways and roads | 897,806.29 |
| Railroads | 9,596.00 |
| Aqueducts and canalizations | 85,099.34 |
| Wharfs | 40,000.00 |
| Construction of buildings | 691,450.00 |
| Repair of buildings | 267,184.62 |
| Repair of barracks and forts | 73,558.21 |
| Avenues, streets, plazas, and malls | 1,205,309.60 |
| Churches | 77,642.32 |
| Monuments and statues | 76,948.25 |
| Bridges | 38,240.80 |
| Permanent appropriations | 246,525.21 |
| Miscellaneous | 170,469.62 |
| Total | 3,879,830.26 |

The message also announces that during the coming celebration of the centenary of independence several important public works, buildings, monuments, etc., will be inaugurated.

It further states that the Second Congress of Students of Venezuela, Colombia, and Ecuador will meet at Caracas in July, 1911, the first congress having been held at Bogota in 1910; and that the First Venezuelan Congress of Medicine will also be inaugurated at Caracas during the same month.

Concluding with the Department of Public Instruction, the president reports that on September 30, 1910, the Republic was divided into two educational districts, each in charge of an inspector general of public instruction. Several changes have been introduced at the Central University of Caracas, in its curriculum as well as in its building. The departments of physics, chemistry, natural history, and bacteriology will each have their own laboratories. The department of anatomy will have its own building, which will be inaugurated on June 25, 1911, under the name of Anatomical Institute, in commemoration of the date on which the Liberator founded the Faculty of Medical Sciences in 1827.



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